## Summary

## **Executive summary**

The retail industry is an important vertical for cellular M2M connectivity with 10.3 million cellular connections today and a potential market size of nearly 80 million POS terminals, ATMs, vending machines, parking meters and fare collection devices worldwide. Berg Insight forecasts that the number of cellular M2M connections in the retail industry will grow at a compound annual growth rate (CAGR) of 21.6 percent to reach 33.2 million connections worldwide in 2017. Shipments of cellular M2M devices will at the same time increase at a CAGR of 10.7 percent from 5.2 million units in 2011 to 9.6 million units in 2017. Cellular M2M technology enables devices such as POS terminals and ATMs to be used at new locations where fixed line connectivity is unavailable or impractical. The technology has a more transformational effect on markets such as vending and parking, where machine operators need to reorganize their operations in order to benefit from the availability of real-time information.

Wireless connectivity has become a very popular option for POS terminals and was incorporated in nearly one third of the devices shipped in 2011. Berg Insight forecasts that the installed base of cellular POS terminals will grow at a CAGR of 21.4 percent between 2011 and 2017 to reach 29.4 million units worldwide in 2017. In 2011, approximately one third of the installed cellular POS terminals globally were in use in Europe or North America. Berg Insight anticipates that this share will decline to less than one fifth by 2017, as emerging markets continue to account for the vast majority of market growth and retain higher attach rates for cellular connectivity.

Berg Insight estimates that 24 percent of the ATMs in North America and 5–10 percent of the ATMs in Europe were connected to cellular networks in 2011. Wireless M2M is especially relevant for ATMs installed at off-site locations as it offers greater flexibility, shorter deployment times and competitive connectivity fees compared to fixed line alternatives. Berg Insight forecasts that the number of wirelessly connected ATMs in the US and Canada will



grow at a CAGR of 12.4 percent to reach 0.22 million units by 2017. The number of wirelessly connected ATMs in Europe are similarly projected to grow at a CAGR of 14.9 percent to reach 0.10 million units in 2017.

The installed base of vending telemetry devices in North America reached an estimated 0.25 million units at the end of 2011, whereas the corresponding figure for Europe was 75,000 units. The vending telemetry market is however still in its infancy in both Europe and North America, as penetration rates are at 2.0 percent and 3.6 percent respectively. Berg Insight expects the adoption rates to accelerate in both North America and Europe during the next few years, resulting in compound annual growth rates in the range of 25–30 percent for both regions. Consequently, the installed base of vending telemetry devices in North America is projected to reach 1.0 million units by 2017, whereas the installed base in Europe is forecasted to reach 0.32 million units in the same year.

The parking industry has been one of the earliest adopters of M2M communication technology and today approximately 39 percent of the world's 0.42 million multi-space meters are connected, primarily to cellular networks. Connectivity has in contrast to this only recently become an optional feature in single-space meters, and today only 3 percent of the world's 3.2 million single-space meters are connected. Berg Insight anticipates that connectivity will eventually be incorporated in all parking meters. Berg Insight forecasts that 69 percent of the world's 0.54 million multi-space meters will have be connected in 2017, whereas 18 percent of the world's 2.75 million single-space meters will be connected in the same year.

Cellular connectivity is incorporated in an estimated 0.1 million fare collection devices worldwide today, such as on-board ticket vending machines, stationary vending machines and handheld ticket sales terminals. Berg Insight anticipates that the market potential for cellular connectivity in public transport will expand as account-based fare collection systems gain ground and increase the need for real-time communication. However, the number of fare collection devices that incorporate cellular connectivity is likely to remain relatively modest, as many fare collection devices can share a communication line with other equipment.

