

## Summary

# Executive summary

Trailer and cargo container tracking is a subsegment of asset tracking and aims to increase operational efficiency and make logistics chains more secure. Berg Insight's definition of a real-time tracking solution is a system that incorporates data logging, satellite positioning and data communication to a backoffice application. Trailer tracking can be part of fleet management solutions including both trucks and trailers. The history of fleet management solutions goes back several decades while tracking and monitoring of shipping containers came in focus after 9/11. Today, mobile and satellite networks can provide ubiquitous online connectivity at a reasonable cost and mobile computing and sensor technology delivers high performance as well as excellent usability. All of these components combined enable the delivery of supply chain management, security management and operations management applications linking trailers, containers, cargo and enterprise IT systems.

In order to make freight transport efficient, products are packed into collective logistics units which can remain intact throughout the delivery chain. Smaller logistics units such as boxes and pallets are often grouped into larger units and loaded on trailers, semi-trailers, swap bodies, rail freight wagons, air freight unit load devices (ULDs) or intermodal shipping containers. These loading units can be applicable to one or more modes of transport. Trailers and semi-trailers are mostly used in road transport, swap bodies can be transferred between road and rail transport, rail freight wagons are used on railways, ULDs are used in air freight transport and shipping containers can be carried on several transport modes. More than 20 million intermodal containers and over 13 million trailers are in use worldwide.

Berg Insight estimates that shipments of remote tracking systems with cellular or satellite communication capabilities for cargo loading units including trailers, intermodal containers, rail freight wagons, air freight cargo containers, cargo boxes and pallets reached 0.9 million units worldwide in 2017. Growing at a compound annual growth rate of 20.9 percent, the shipments are expected to reach 2.4 million units in 2022. During the same period, the installed base of remote tracking systems is forecasted to grow at a compound annual growth rate of 19.6 percent from 3.7 million units at the end of 2017 to 8.9 million units by

2022. Trailer tracking is the largest market segment, estimated to account for 49.3 percent of the total installed base of tracking units deployed on trailers and cargo containers in 2017. Intermodal container tracking is the second largest segment with an estimated share of 32.9 percent of the total installed base at the end of 2017.

Berg Insight ranks ORBCOMM as the largest provider of tracking solutions for cargo loading units, having a significant installed base of trailers as well as containers. The company has in the past years been highly involved in M&A activity related to real-time asset tracking, including notable acquisitions such as Blue Tree Systems, Euroscan and WAM Technologies. The latter was involved as a subcontractor for the Maersk/AT&T project to roll out a system for real-time tracking of Maersk entire fleet of 270,000 refrigerated containers. The project is one of the largest cellular-based industrial IoT deployments of its kind. The North American trailer telematics market is dominated by ORBCOMM and SkyBitz which both have more than 300,000 active units, while Omnitrac, Spireon and I.D. Systems all have between 100,000–200,000 units. The European trailer telematics market is considerably smaller. Idem Telematics is the leading player with 60,000 active units while other top Europe-based players include Schmitz Cargobull and Novacom with over 25,000 active trailer units each. Mecomo and Agheera, also based in Europe, are strong vendors in the adjacent swap body segment. Envotech and Numerex, based in Malaysia and the US respectively, have large installed bases on containers. Amsted Rail, Asto Telematics and Nexiot have all deployed thousands of tracking devices on rail freight wagons. Other significant players include Sensitech that has an installed base of over 200,000 units in the general cargo segment and OnAsset Intelligence which is active in the air freight cargo tracking market.

Berg insight anticipates that there will be a strong focus on increased supply chain visibility and transport security in the coming years. Tracking of trailers, intermodal containers and rail freight wagons is increasingly common and technology advancements allow for ever-smaller logistics units such as individual pallets or cargo boxes to be tracked at a reasonable cost. General acceptance of remote tracking solutions will first be established in specific usage scenarios such as high-value, time-critical or refrigerated goods. Decreasing hardware costs, improved battery life and the emergence of LPWA technologies are expected to impact the market positively and foster wide-spread adoption of cargo tracking solutions in the coming years.