

## 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 communications 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 25 million intermodal containers and over 14 million trailers are in use worldwide.

Berg Insight estimates that shipments of remote tracking systems with cellular or satellite communications capabilities for cargo loading units including trailers, intermodal containers, rail freight wagons, air freight cargo containers, cargo boxes and pallets reached 2.0 million units worldwide in 2018. Growing at a compound annual growth rate of 27.4 percent, the shipments are expected to reach 6.8 million units in 2023. During the same period, the installed base of remote tracking systems is forecasted to grow at a compound annual

growth rate of 27.3 percent from 6.1 million units at the end of 2018 to 20.4 million units by 2023. Trailer tracking is the largest market segment, estimated to account for 40.7 percent of the total installed base of tracking units deployed on trailers and cargo containers in 2018. General cargo tracking and intermodal container tracking are the second and third largest segments with estimated shares of 27.7 percent and 24.8 percent respectively of the total installed base at the end of 2018.

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's total installed base reached 915,000 units at the end of 2018. The second largest player SkyBitz has an installed base of 510,000 tracking units, primarily on trailers. Additional large players on the North American trailer telematics market are Omnitrac, Spireon and I.D. Systems, having between 100,000–300,000 installed tracking units each. The European trailer telematics market is considerably smaller. Idem Telematics is the leading player with 65,000 active units while other top European players include Schmitz Cargobull, CLS Group and Transics/WABCO having between 25,000–40,000 active trailer units each. Mecomo and Agheera, also based in Europe, are strong vendors in the adjacent swap body segment. Envotech based in Malaysia and Sierra Wireless and Geoforce based in the US have large installed bases on containers. Future Telematics, Intermodal Telematics and Nexiot based in Europe and Amsted Rail based in North America are significant vendors of tracking solutions for rail freight wagons. Sensitech, Roambee and OnAsset Intelligence are moreover notable players in the general cargo segment, also offering solutions for air freight cargo tracking.

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, ULDs and rail freight wagons is increasingly common and technology advancements in recent years has made it possible for smaller logistics units such as individual pallets or cargo boxes to be tracked at a reasonable cost. General acceptance of remote tracking solutions was first 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.