ADDRESSING THE **CHALLENGES** FOR **PROVIDERS OF FLEET MANAGEMENT SOLUTIONS**

The market for fleet management solutions has a strong positive outlook, despite being a relatively mature sector. More vehicles are being connected and revenue for services continues to grow. However, for service providers, there are a number of challenges that need to be addressed.

This report, aimed at providers of fleet management solutions, explores both the opportunity for these service providers but also outlines some of the challenges that need to be addressed.

THE MARKET CONTINUES TO EXPERIENCE STRONG GROWTH

Analysys Mason is forecasting that the number of light and heavy commercial vehicles connected globally will increase from 70 million at the end of 2017 to almost 150 million by 2025, with the number of connected light vehicles growing faster than the market for heavy goods vehicles. As the cost and complexity of fleet management solutions continue to decline, solutions will become increasingly attractive to managers of smaller commercial vehicles, and this is driving the faster growth in the light commercial vehicles market.

The total value of fleet management solutions globally in 2025 will be around USD19 billion, up from around USD12 billion in 2017. The increase in value of the market (up 64%) will be slower than the number of connections (up 110%) due to price declines in existing solutions, the increasing popularity of simpler, lower cost solutions, and the related gradual shift in the market towards solutions for light commercial vehicles.

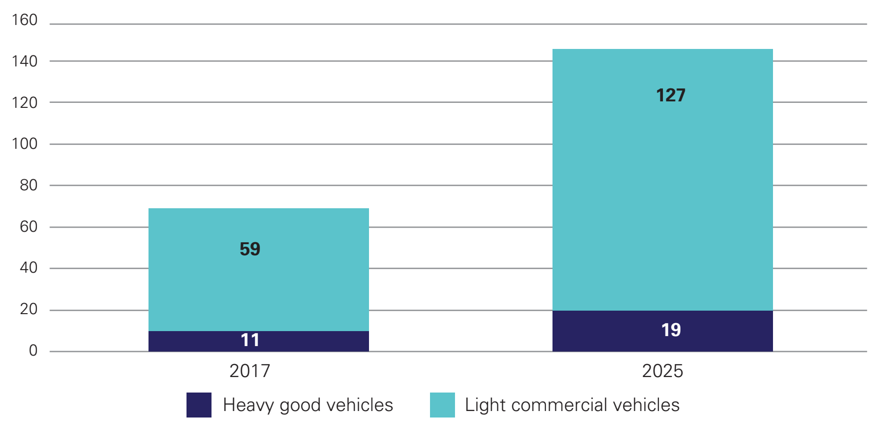

Figure 1: Total number of cellular connected vehicles, 2017 and 2025, worldwide
[Source: Analysys Mason, 2018]

Rates of growth in fleet management solutions vary by region and reflect the development of the economy. Growth will be highest in low- and middle-income countries, where penetration of fleet management solutions historically has been relatively low, growing by an average approaching 15% a year between 2017 and 2025.

In high-income regions, despite penetration rates that already are high, we expect to see growth rates of around 8-9% in many countries. Again, light commercial vehicles will be a key component of this growth.

PROVIDERS OF FLEET MANAGEMENT SOLUTIONS WILL FACE MANY CHALLENGES

Despite the strong growth in demand for fleet management solutions, many challenges are facing the companies that sell fleet management solutions.

Taking the supply side, we can see that competition and differentiation will be a problem for many providers. The issues here include:

- **High levels of competition from providers with similar features**. In many countries, there are numerous companies offering telematics solutions to fleet managers. For example, in Saudi Arabia, where fleet management firms need a licence to operate, more than 100 companies have the relevant licence. In all countries, many of the competing firms offer a similar set of services. In some cases, the offerings are based on the same white-label platform and are essentially identical. This context, with many providers offering similar solutions, can make it difficult for suppliers to stand out.

- **Market consolidation may create some very large players with significant economies of scale.** The current number of fleet management companies probably is unsustainable, and some companies will drop out of the market while others consolidate. This consolidation, in itself, will create problems for the other, smaller players, as the larger providers will benefit from economies of scale, such as greater buying power and the ability to amortise fixed costs, such as product development, across a larger customer base. This consolidation already can be seen in the moves of companies such as Verizon Connect, which has augmented its pre-existing fleet business with the purchase of Telogis, Fleetmatics (for USD2.4 billion), and Movildata Internacional.

Combined, these two factors put pressure on prices. The large number of competitors that lack strong feature differentiation is inevitably leading to downward pressure on price. Indeed, we already have seen some evidence of this. For example, TomTom has seen its average revenue per telematics subscription fall by 4% per year over the past five years to EUR13.5 per month today from EUR16.7 per month in 2013 (Figure 2). While larger players, like TomTom, may be better able to absorb lower prices as their costs to serve each additional customer is lower, the overall trend of declining average revenue per unit (ARPU) may put smaller players under greater pressure.

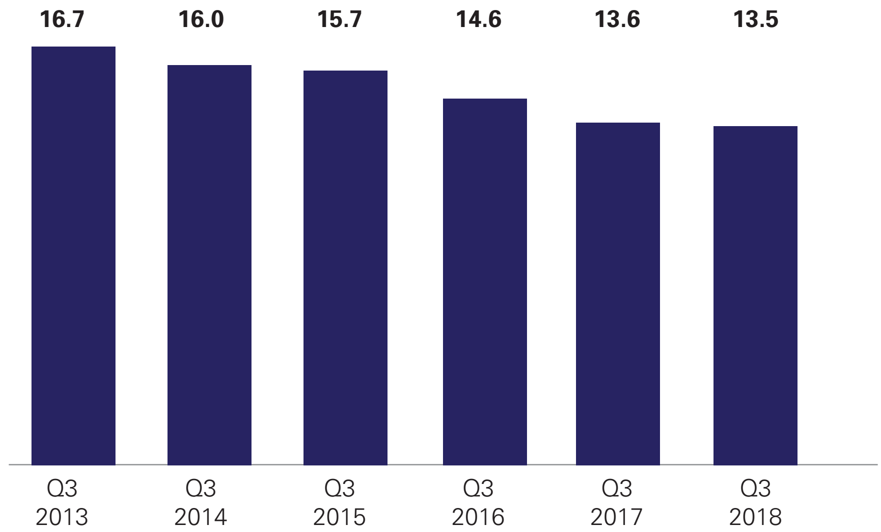

Figure 2: TomTom monthly revenue per telematics subscription, EUR
[Source: TomTom, 2018]

Fleet management companies of all sizes, but especially smaller players, need to have tight management over costs if they are to keep prices low and remain competitive.

SOLUTIONS PROVIDER NEED TO EXPLORE ALL ASPECTS OF COST

With this pressure on price, fleet management companies need to look at all aspects of costs. As well as fixed costs, these companies should, in particular, explore how to better manager variable costs. The most common model for fleet management companies is to charge an agreed fixed monthly fee per vehicle connected, typically around USD20 to USD50 per vehicle. While this model gives its customers cost certainty, it leaves the providers exposed – any unexpected increase in costs will have a direct impact on margins.

Connectivity is the key element of variable costs. While connectivity costs for most devices will be predictable most months, unexpected events can hit these costs, particularly upgrades for a device's firmware. Fleet management providers need to be able to manage these costs, to whatever extent possible. Controlling these costs could include combining connectivity data with the timing of device firmware upgrades to ensure that the firmware upgrades are not performed when the device is roaming.

Providers of telematics solutions also need connectivity contracts that match the terms of their contracts with customers. For example, many usage-based insurance companies offer an initial contract of 8 or 10 months, which are incompatible with standard 12-month connectivity contracts.

Connectivity contracts also should match varying usage levels for different vehicles. In any given month, usage will vary across a fleet. Fleet management companies should look for flexible contracts that help manage these costs, rather than be forced to pay overage fees for some devices while other devices only use a small portion of their quota.

Fleet management companies should explore how they can increase automation of any existing processes. Manual systems will be costly, prone to error, and are not scalable. Over the air (OTA) upgrades are one area where many fleet management providers could improve current processes, whether to enable new features or fix security vulnerabilities. Fleet management providers need to look for solutions that automate OTA updates, leverage connectivity status to increase success rates, and lower the operational costs of a large-scale update.

NEW CONNECTIVITY OPTIONS CAN REDUCE COSTS

Fleet management providers also can look at new types of connectivity that may help reduce costs further. For example, LTE-M modules are available for less than standard LTE modules and, yet, offer the features required for most applications (e.g., real-time location support, up to 1Mbit/s data speeds, voice support). LTE-M connectivity pricing also may be lower than for standard LTE access.

For some applications, NB-IoT, which promises even lower module and connectivity costs, may be suitable, though the lack of real-time location support, lower data rates, and lack of voice support make its appeal limited for most vehicle tracking applications.

VEHICLE OEMS REPRESENT A THREAT TO FLEET MANAGEMENT COMPANIES, BUT ONE THAT CAN BE MANAGED

The other changing element in the supply of fleet management services is the growing role of vehicle OEMs, who are increasingly equipping vehicles with embedded connectivity. For example, Scania Fleet Management "is currently included in all vehicles sold in 54 of Scania's markets and is gradually being extended into new markets"[1]. Scania has more than 315 000 connected vehicles. Independent fleet management providers are competing not just with other similar providers, but also with these OEMs, who have the advantage of being able to package fleet solutions along with the sale or lease of a vehicle.

Four factors mitigate the threat to the independent providers.

- First, while new vehicles increasingly are connected, many vehicles in a fleet are old and the average age is increasing[2], according to the ACEA, the European Automotive Manufacturers association. The opportunity for aftermarket fleet management solutions remains large.
- Second, we believe that few fleet operators will operate vehicles all from the same OEM and yet they will want a consistent set of metrics in consistent formats. This may be hard to achieve with embedded systems.
- Third, fleet operators may even want measures not captured by the standard systems offered by the OEM.
- Finally, fleet operators may not wish to be locked into the fleet management software offered by their OEM.

All of which create opportunity for third parties.

1 https://www.scania.com/group/en/section/solutions/services/scania-fleet-management/
2 https://www.acea.be/statistics/tag/category/average-vehicle-age

OTHER CHANGES IN THE MARKET ARE CREATING NEW OPPORTUNITIES FOR FLEET MANAGERS

There also are many new opportunities emerging for fleet management companies. Indeed, while the pressure on costs and pricing has obvious negatives, it also means that fleet management companies may find new opportunities opening up, particularly for light commercial vehicles for which previous systems have been too expensive.

This is reflected in our forecast, which anticipates the market for light commercial vehicles that are connected increasing faster than the heavy vehicle market. These lower prices should especially be important in lower income countries by making solutions more affordable.

The new types of connectivity, such as NB-IoT and LTE-M, may open up new adjacent opportunities. Many fleet management companies already are involved in a broader set of logistics, asset tracking, and even remote monitoring. For example, as well as offering fleet management, Samsara also offers solutions for the industrial sector, such as condition and remote monitoring.

Many telecoms network operators around the world are launching new NB-IoT and LTE-M networks. As in Figure 3, we can see that 89 operators in 50 countries have announced that they have launched or plan to launch NB-IoT[3]. LTE-M coverage is less extensive, but networks are in place or planned by 30 operators in 23 countries (Figure 4). LTE-M coverage already is in the USA and much of Europe.

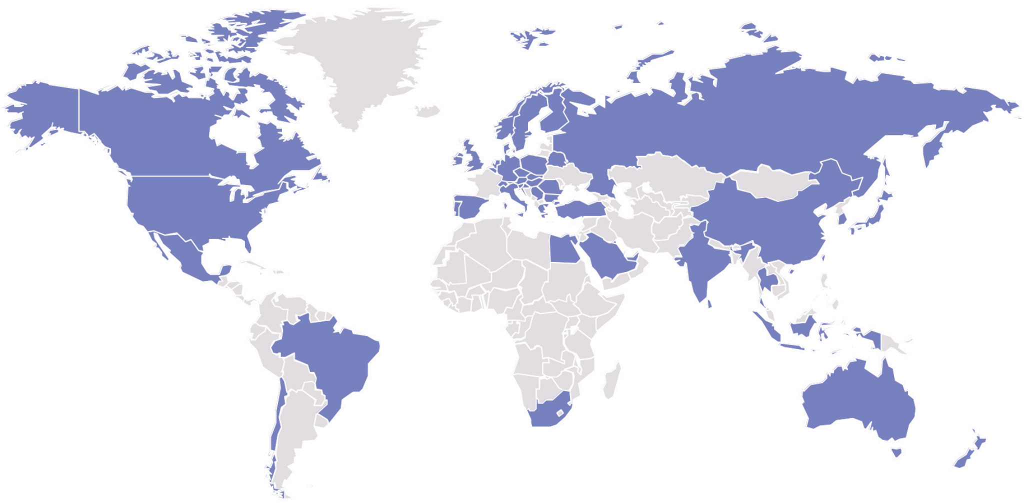

Figure 3: Countries with live or planned NB-IoT networks
[Source: Analysys Mason, 2018]

3 Data from Analysys Mason's LPWA networks index 3Q 2018
http://www.analysysmason.com/Research/Content/Data-set/LPWA-networks-index-RDME0/

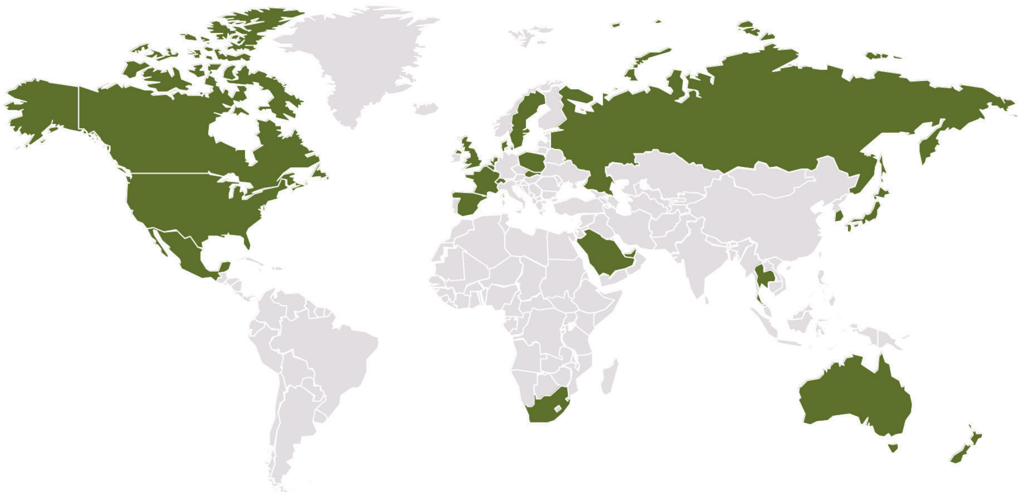

Figure 4: Countries with live or planned LTE-M networks
[Source: Analysys Mason, 2018]

As well as both lower connectivity and lower module costs, these systems also will have other benefits over traditional cellular connectivity, such as greater range and longer battery life. This will make them applicable to new types of use cases, as for example monitoring containers that are stored underground and have no access to power.

Changes in regulation, such as the Electronic Logging Device (ELD) legislation in the USA, also may help drive greater demand for more advanced telematics and fleet management solutions. As we discussed in our paper, “The Benefits of Using Cellular to Meet the ELD Mandate”, fleet operators do not require embedded connectivity to meet the demands of ELD rules as connectivity can provide a number of additional benefits, such as real-time mapping. It also can simplify compliance while potentially reducing costs.

FLEET MANAGEMENT: POSITIVE OUTLOOK BUT WITH CHALLENGES FOR PROVIDERS

The fleet management market displays many positive attributes for suppliers. Despite its maturity, strong growth still can be expected, with regulation and technology developments helping to open up new opportunities. The market does have challenges, in particular due to the highly competitive nature of the market and limited scope for differentiation, which are combining to put pressure on price, and forcing providers to focus on reducing costs.