



# RAIL AT A JUNCTION

## NEW TECHNOLOGY BRINGS NEW OPPORTUNITIES FOR TRAIN EQUIPMENT MAKERS

European rail has long functioned along national lines: an incumbent national railroad company worked with single suppliers of vehicles, tracks, and signaling systems. This model has spared rail the disruptions that have hit some other industries, but it is now under attack. The standardization of components is increasing the potential of scale effects and driving down prices. Rail liberalization in Europe has invited new competition from overseas. And players from the digital world are entering the business, providing applications that improve security or provide better customer information.

The changes mean that established equipment manufacturers need to transform their business models and make sure they are competitive in the fields where they operate. Rolling stock makers have a particular challenge. Though rail cars and locomotives are the mainstay of the industry, margins hardly rise above 7 to 8 percent at most global rolling stock vehicle manufacturers. In contrast, aftermarket services and control and signaling systems routinely command double-digit margins, because they provide high added value without the costly assets needed to produce machinery. So equipment makers need to increase their presence in these technology-heavy businesses, (see Exhibit 1), if necessary through acquisitions: Alstom SA of France, for example, recently acquired Signalling Solutions Ltd. of the United Kingdom.

### HOW TO CUT COSTS

To reduce costs, a global search is needed for new components suppliers. Deutsche Bahn has been procuring wheels in the Ukraine and rolling stock in Poland. In November 2015, it said it would set up

a procurement office in China to get access to Chinese suppliers of replacement components such as wheels. Digital manufacturing techniques can also cut costs. One prerequisite is the modularization and standardization of construction. Standardized modules can then be used in different products, driving economies of scale. Later, data streamed from rolling stock in operation will provide feedback for the design of updated versions. Longer term, rail suppliers might become primarily designers, outsourcing the 3D printing of modular components to smart factories.

### ESTABLISHING MARKET PRESENCE

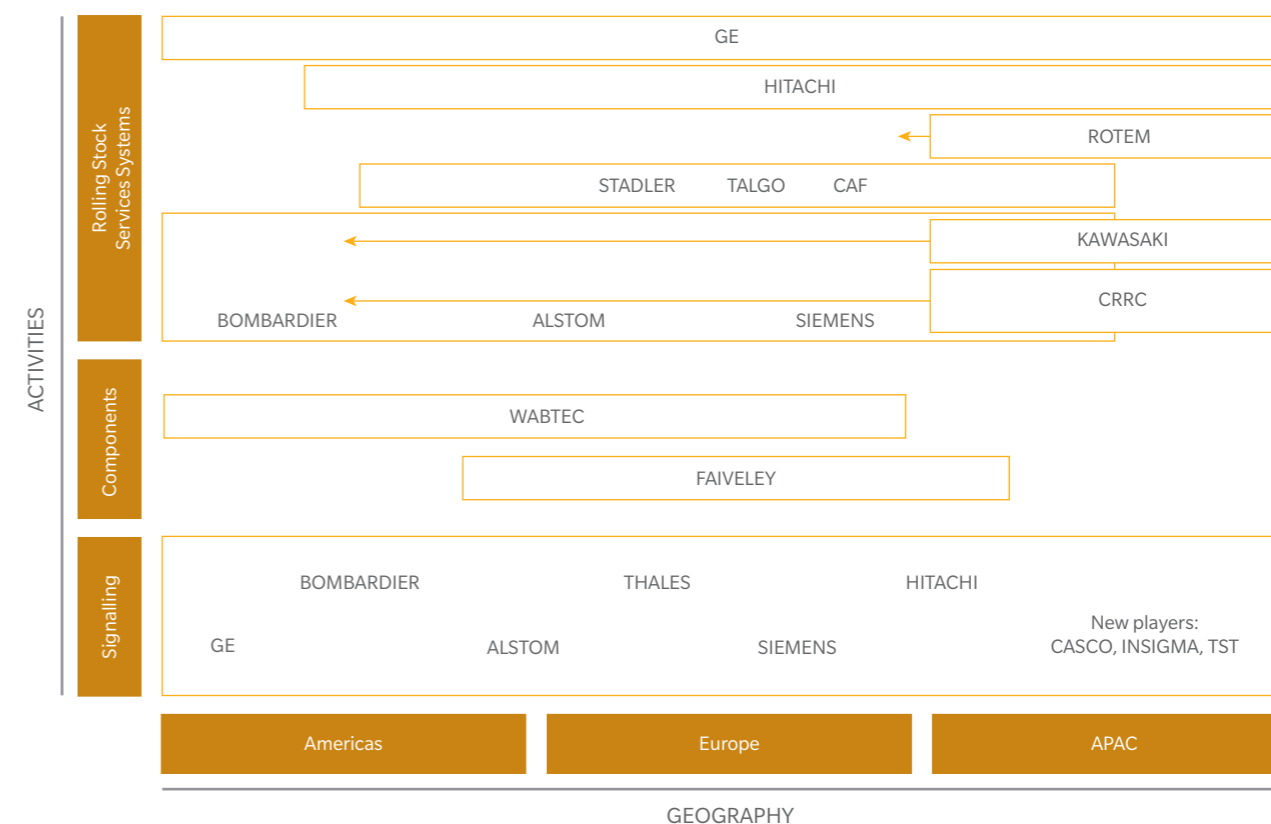
In sales, equipment makers must go beyond one-off transactions and tenders, and instead concentrate on long-term relationships and strategic partnering. Key customers in a given regional market are critical, as they often operate amid a complex ecosystem of stakeholders, influencers, and decision makers. Transport in and around Paris, for example, involves city and regional governments, several rail service operators, plus multiple engineering and construction companies. Incumbent suppliers often have local facilities, and

THE NEXT DECADE IS LIKELY TO SEE GLOBAL CONSOLIDATION THAT WILL CHANGE DRAMATICALLY THE RAIL SUPPLIER LANDSCAPE



Exhibit 1: The rail industry turns international  
A new generation of global player is starting to compete in different continents

#### EXCERPT OF PLAYERS



Source: Oliver Wyman analysis

have established working practices with the operators' technical staff. They are plugged into the political circles where important decisions are made. And they have built connections with the national engineering and construction contractors. That means they are often best positioned to sustain such relationships and accumulate knowledge of clients.

To participate in markets like this, other equipment makers need to adopt the same approach, or else find partners that are well positioned. Once manufacturers have found markets, they should deepen their presence through enhanced downstream offers, including ownership of cost-saving services, such as predictive maintenance, and ways to enhance reliability, such as spare parts inventory management.

Some of these moves may involve mergers and acquisitions: The next decade is likely to see global

consolidation that will change dramatically the rail supplier landscape. To fare well in the upcoming wave of mergers and acquisitions, rail equipment suppliers need to become more fit and better focused, addressing areas of weakness such as overcapacity and investing in the things they do best. Though disruption is arriving late to the rail industry, it's coming down the line.

**Joris D'Inca**  
is a Zurich-based partner in Oliver Wyman's Global Transportation practice

**Gilles Roucolle**  
is a Paris-based partner in Oliver Wyman's Global Transportation practice