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#220



Disruption Radar

# Bi-Monthly Market Insights

Every week sees a barrage of new announcements from the industry - with new vehicles, technologies, features, partnerships, and acquisitions announced at an increasingly frequent rate. These alone often vary largely between regions and in scale – from a new piece of technology intended specifically for one market, to a new vehicle envisioned for a global audience.

These announcements can also span further across the automotive landscape – with new legislation and regulations unveiled, new challenges faced by OEMs, suppliers, and start-ups across the supply chain, and new products unveiled by technology firms and entertainment companies designed for the automotive industry. With such a high volume of announcements made so frequently, it can often be easy to miss the relevance, context, and significance of each one.

SBD’s series of Bi-Monthly Market Insights works to filter, highlight, and contextualize the most important announcements coming out of the industry. Further analysis works to identify their impacts in both the short-term and long-term and map out the best practices for responding to them. Delivered twice every month to balance with the highly changing market situation, each report provides concise insights and clear actions on a range of relevant topics.

RELATED SBD REPORTS

**221 – Quarterly Wrap-Ups**

SBD’s Quarterly Wrap-up helps you quickly catch-up on CASES trends from the last three months, providing insights from our analysts on the impact of major announcements.

This includes looking at the top trends of the quarter and charting the major movers based on their impact over the last three months.

<p><b>COVERAGE</b></p> <div style="display: flex; justify-content: space-around;">  GLOBAL              NA              CHINA              EUROPE           </div>	<p><b>FREQUENCY</b></p> <div style="display: flex; justify-content: space-around;">  ANNUALLY              Bi-Monthly              ONE-OFF           </div>	<p><b>PUBLICATION FORMAT</b></p> <div style="display: flex; justify-content: space-around;">  PDF              POWERPOINT              EXCEL              ONLINE           </div>	<p><b>PAGES</b></p> <div style="display: flex; justify-content: center;">  6           </div>
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## Key questions answered

- > What are the most significant announcements coming out of the automotive industry?
- > What has happened that warrants a deeper examination?
- > What are the impacts of announcements, both in the short-term and in the longer-term?
- > What should decision-makers be considering as a reaction to announcements?

## This research supports



PRODUCT PLANNERS



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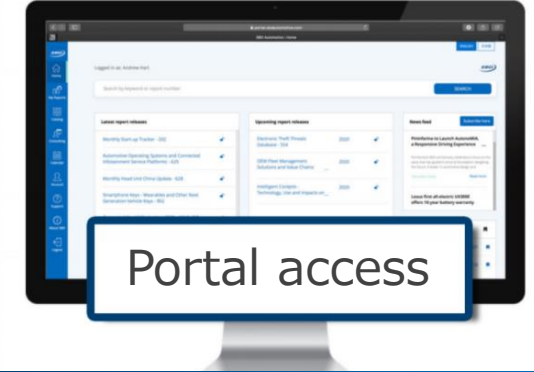
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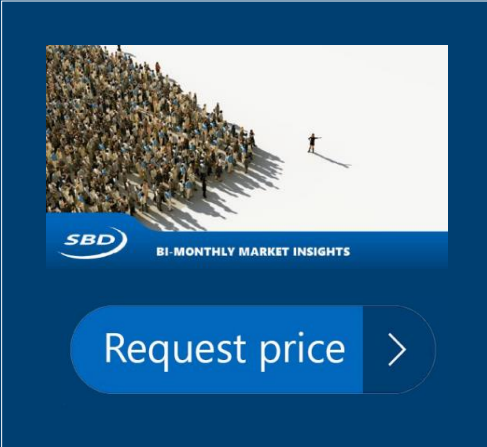
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# Example slides from the report

An example slide from the report is shown within a white-bordered box. The slide features a photograph of a large crowd of people walking on a snowy slope. At the bottom of the slide, there is a dark blue banner containing the SBD logo on the left and the text 'BI: MONTHLY MARKET INSIGHTS' on the right. Below the banner is a blue button with the text 'Request price' and a white right-pointing chevron symbol.



## This quarter's Big Thought

# 3G sun-setting to leave 27Mln US cars in the dark

88 Million cars on US roads now have built-in connectivity, but SBD estimates that up to 27 Million\* of those cars could lose access to vital connected car services like eCall and bCall during 2022.

**Why?** Network operators are sunsetting their 3G networks to free-up bandwidth for 5G service, and most OEMs have yet to implement countermeasures that will allow consumers to upgrade their 3G-enabled vehicles.

In this insight we explore which brands are most exposed to 3G-sunsetting and how some are finding creative ways to keep their customers connected.

\*Not all vehicles have active connections



Big Thoughts

3G sunseting

# What is happening?

# 27 Million

# of 3G-enabled cars in USA that could be disconnected as 3G networks are closed down (32% of total USA connected car parc)

Year	3G (Millions)	4G/5G (Millions)	Total (Millions)
2020	28	32	60
2021	28	48	76
2022	28	62	90
2023	26	78	104
2024	24	94	118
2025	23	107	130
2026	22	123	145
2027	21	144	165
2028	20	158	178
2029	18	168	186
2030	16	184	200

### Who is most affected?

Manufacturer	Percentage
General Motors	37%
Toyota Group	11%
Stellantis	11%
Mercedes-Benz	9%
BMW Group	7%
Hyundai Group	7%
Other	5%
Group	4%
Volkswagen	3%
RNMA Grp	3%
Honda Group	3%
Ford Group	3%

### Key takeaway

By the end of 2022 all telecom operators in USA will have shut down their 3G networks. This will leave up to 27 Million 3G-enabled vehicles without the ability to connect to servers.

- Verizon was the first to shut down 3G from December 2021, followed by AT&T from February 2022 and T-Mobile/Sprint is expected to do the same from March 2022.
- Around 1/3<sup>rd</sup> of all vehicles with embedded TCUs currently rely on 3G networks – that's 27 million vehicles
- Not all of these are necessarily active connections – many of those vehicles will have required subscriptions after an initial free period, and OEMs typically only achieve a 15-25% subscription rate.
- However, millions of customers will be affected by 3G-sunseting, and many of those may be surprised by services suddenly not working.

5



# Why does it matter?

## ↑↑ Negative press

**3G Shutdown: Is Your Car About to Become Obsolete?**

**How the 3G Shutdown in 2022 Could Screw Your Car**

## ↑↑ Dissatisfied customers



Solidsnake227  
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So I got the email from BMW "Impending changes to 3G technology and your BMW ", I called them and they said my car not eligible to upgrade! My car comes with telematics unit, the car already has an active subscription till 2025....



## ↓↓ Road safety



## ↓↓ Commercial opportunities



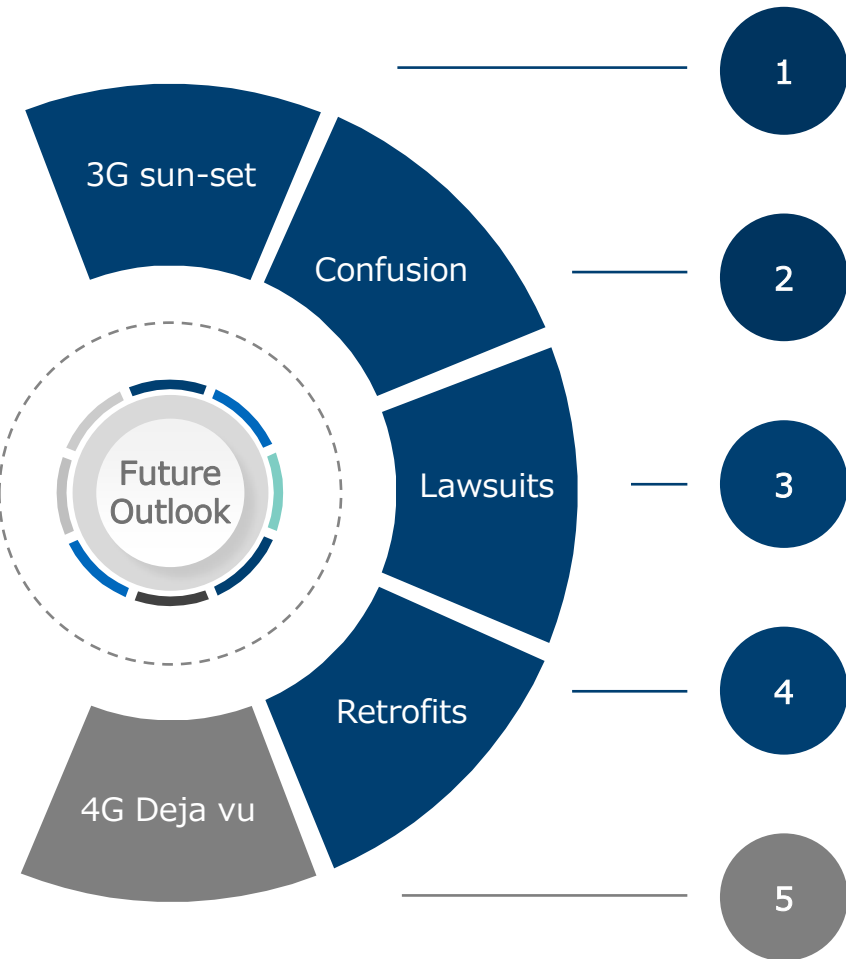
## Key takeaway

Although the decision to close 3G networks isn't being taken by OEMs, they are very much feeling the consequences:

- **Press** – Journalists have been quick to highlight which brands are most affected and which aren't yet providing alternatives.
- **Dissatisfaction** – Owner forums are already filling up with confused and angry clients questioning why their relatively new cars were fitted with obsolete equipment.
- **Safety** – 27 Million fewer connected cars equates to approximately 500,000 fewer eCalls, of which 5,000 could be life-saving.
- **Commercial** – at a time when many car makers are finally extracting real commercial value from vehicle data, losing such a large proportion of connected vehicles hits their bottom line.



# Where next?



1 By the end of 2022 all 3G networks will be shut down and up to 27 Million cars will be disconnected

2 Even with the best comms strategy, expect a significant number of consumers to not find out until it is too late

3 OEMs are likely to face large class-action lawsuits, with lawyers claiming OEMs knowingly fitted obsolete hardware

4 OEMs to continue ramping up 4G-retrofit programs, potentially with aftermarket or Telecom partners

5 At some point we will be back in the same place, and proactive OEMs will start thinking now how to minimise disruption

## Key takeaway

The industry is in a short-term scramble to ensure consumers who were previously enjoying connected services are able to continue accessing them.

- In the coming months expect to see more negative press and consumer feedback relating to de-activated connected services – potentially including specific examples of how eCall services were disabled on 3G-equipped vehicles involved in accidents.
- In response, OEMs will be looking for ways to quickly and cost-effectively replace 3G with 4G connectivity without the need for costly retrofitting of entire TCUs.
- Longer-term, OEMs may at some point during the 2030s face the same difficulties with 4G sun-setting. Although that seems far away, the problem will be 3 times bigger as the entire vehicle parc will be connected by then (compared to 30% today).





# Who to watch out for?



“We’ve made it easy for automakers to keep their customers connected beyond the 3G sunset. Our OEM-grade solution is affordable, ready for deployment and most importantly, provides drivers and passengers with a high-value mix of features, including life-saving emergency services.

Kenny Hawk – CEO Mojo

## Key takeaway

Mojo and VW/Audi have announced a partnership to deliver owners of 3G-equipped vehicles a 4G dongle that supports many of the services previously offered via the embedded TCU. SBD spoke to Mojo CEO, Kenny Hawk, to get his thoughts.

- Mojo is offering the same program to other OEMs, which includes a plug-and-play 4G LTE OBD-II telematics device, automatic eCall and access to a range of app-based features.
- The package is offered at a 1-time price of \$295 – significantly cheaper than many of the retro-fit 4G solutions offered by various OEMs.
- VW is offering the solution to owners of certain MY2014-16 vehicles equipped with Car-Net free of charge.
- Audi has worked with Mojo to offer a branded version called ‘Motion for Audi Connect’ – according to Mojo the program was rolled out in months.

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# How should you react?

# 1

## Over-communicate

While most OEMs have sent some level of communication to their customers (at least the ones they still have contact details for) OEMs shouldn't assume the message has been received. Consider broader campaigns linked to clear alternatives.

# 2

## Quick & Affordable

Something is better than nothing, and sooner is better than later. While aftermarket dongles may not offer the same functionality as embedded solutions, consumers are more likely to respond positively to it than if they are asked to pay a large HW/fitment fee.

# 3

## 5G-friendly

4G-sunsetting may seem far away, but it is never too soon to be considering ways to prepare all vehicles for a 5G future. Even if OEMs aren't yet ready to start fitting 5G, optimizing packaging/antennas as well as supporting scalable chipsets can help minimize disruption later on.





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# Contact SBD Automotive

## Do you have any questions?

If you have any questions or feedback about this research report or SBD Automotive's consulting services, you can email us at [info@sbdautomotive.com](mailto:info@sbdautomotive.com) or discuss with your local account manager below.



[info@sbdautomotive.com](mailto:info@sbdautomotive.com)



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**Garren Carr**  
**North America**  
[garrencarr@sbdautomotive.com](mailto:garrencarr@sbdautomotive.com)  
+1 734 619 7969

**Luigi Bisbiglia**  
**UK, South & West Europe**  
[luigibisbiglia@sbdautomotive.com](mailto:luigibisbiglia@sbdautomotive.com)  
+44 1908 305102

**SBD China Sales Team**  
**China**  
[salesChina@sbdautomotive.com](mailto:salesChina@sbdautomotive.com)  
+86 18516653761

**Andrea Sroczynski**  
**Germany, North & East Europe**  
[andreasroczynski@sbdautomotive.com](mailto:andreasroczynski@sbdautomotive.com)  
+49 211 9753153-1

**SBD Japan Sales Team**  
**Japan, South Korea & Australia**  
[postbox@sbdautomotive.com](mailto:postbox@sbdautomotive.com)  
+81 52 253 6201