



AD PUNCTUM

Autos & Mobility Industry Briefing -- 18th June to 24th June 2018

News is arranged by company and topic. Stories that apply to more than one company or topic are duplicated.

News about the major automakers

BMW (history)

- Formed a JV with Critical Software to work on projects ranging from in-car infotainment to automated sales. ([BMW](#))
- Working with TTTech Auto to improve the quality and security of software for autonomous vehicles. ([TTTech](#))
- BMW celebrated their CEO being voted the most popular manager in Germany with a Q&A about his management style. ([BMW](#))
- Said that clarity on post-Brexit trading conditions were required by the end of the summer, otherwise it would have to start making contingency plans. ([Economic Times of India](#))
 - Implication: Given that BMW has already opened alternative sites for Mini production, it appears likely that any summer announcements could impact Hams Hall or Swindon Pressings.

Daimler (history)

- Issued a profit warning for full year 2018, blaming likely tariffs on US-built vehicles imported into China (with the expectation that both unit sales and margins would suffer). The impact of failing to certify all vehicles under WLTP before the new regulations take effect and recall costs were also factors. ([Daimler](#))

Ford (history)

- Ford and VW are exploring potential collaboration on a range of topics relating to commercial vehicles but stressed that equity arrangements and cross-ownership stakes were not under discussion. ([VW](#))
- Ford believes self-driving delivery vehicles have greater application in the suburbs than built-up areas. ([PC Mag](#))

Geely (includes Volvo) (history)

- Volvo started production at its Charleston, USA, plant. The factory can produce up to 150,000 cars per year. ([Volvo](#))
- Swedish authorities reportedly told Volvo that it cannot carry out its planned self-driving testing program with “real” families due to the risks involved. The project was already severely delayed. ([Autonomes Fahren](#))

General Motors (history)

- Investing \$175 million in the Lansing, USA plant to install equipment for the new sedan that replaces the ATS and CTS. ([Detroit News](#))
- Reported that installing a \$35,000 3D printer at one factory had led to cost savings of over \$300,000 for new tooling, plus reductions in downtime. ([3D Printing Industry](#))

Hyundai / Kia (history)

- Hyundai and Audi will jointly develop fuel cell technologies. Affiliates such as KIA and VW will have access to any benefits from the agreement. Hyundai implied that they had superior experience and technology to Audi, but that the potential business for Hyundai Mobis was a major factor in the partnership. ([Hyundai](#))
- South Korean unions threatened to take legal action to prevent Hyundai creating a lower cost manufacturing JV with a regional government because they believe the company has sufficient capacity in its unionised plants. ([Yonhap](#))
- Granting more autonomy to its regional offices to enable faster decision making. A recruitment drive is on for staff in finance, planning, product development and sales. ([Yonhap](#))

Nissan (includes Mitsubishi) (history)

- Carlos Ghosn said that although discussions about a deeper relationship between Renault, Nissan and Mitsubishi, a full takeover by Renault was not one of the options. ([Reuters](#))

PSA (includes Opel/Vauxhall) (history)

- PSA believes that 120 million km of test mileage are necessary to verify self-driving on highways -- with greater distances required for rural roads and cities. ([PSA](#))
- Faurecia announced an updated credit facility, providing €1.2 billion until 2023. ([Faurecia](#))

Renault (history)

- CEO Ghosn said that although discussions about a deeper relationship between Renault, Nissan and Mitsubishi, a full takeover by Renault was not one of the options. ([Reuters](#))
- Acquired a 75% stake in taxi and private hire vehicle dispatch firm iCabbi through its financing arm. ([Renault](#))

Suzuki

- Released the first official images of the next generation Jimny. ([Autocar](#))

Tesla (history)

- Said that it had been sabotaged by a disgruntled employee and shortly afterwards experienced a fire at its Fremont plant that CEO Musk said was “hard to explain”. ([New York Times](#))
- Created a final assembly line in a temporary building to increase Model 3 production. Judging by the reported equipment, size, number of toilets and fire extinguishers, the new line is low volume. This could still have benefits for overall production if it allows models in launch or with low take rates to be assembled with less disruption to the main lines. ([Wired](#))
- Said in an internal email that Model3 production was consistently above 500 units per day but that “radical improvements” were needed in several areas of the factory. ([CNBC](#))
- CEO Musk said Germany was the “leading choice” for a new Tesla battery factory, probably near the border with France and the Benelux countries -- should Ford employees in Saarlouis prepare their CVs? ([Business Insider](#))
- A group of hackers published a series of images from Autopilot overlaid with system categorisation and radar data. Their analysis reveals previously unknown shadow capabilities of Autopilot (e.g. how good it is at tracking stopped vehicles) and provide information on which cameras perform which detection role. ([Electrek](#))
- Suing a former Gigafactory worker, accusing them of stealing data and trade secrets and leaking misleading information to the media about quality standards. ([Bloomberg](#))

Toyota (history)

- Dropping the Avensis nameplate in favour of Camry in Europe. ([Toyota](#))
- Launched an all-new Century luxury limousine aimed at the Japanese market. The model has a sales target of 50 units per month. ([Toyota](#))
- Reportedly undertaking aggressive cost cutting in the marketing function, however from the examples given it wasn't clear whether the measures were the first signs of a major revamp or normal business. ([Reuters](#))
- Toyota's US financing arm will sell \$3 billion in financial products to retail investors. ([Toyota](#))

VW Group (history)

- Following the arrest of Audi's CEO, VW's board agreed to "temporarily" release him from his duties and Audi's head of marketing and sales has taken on his responsibilities on an interim basis. ([VW](#))
- The truck and bus division is to be renamed Traton Group, in a step VW says prepares the division for "capital market readiness". ([VW](#))
- Porsche purchased a 10% stake in Croatian electric sports car builder and component supplier Rimac. ([VW](#))
- Will increase the capacity of the FAW-VW Foshan plant to 600,000 units annually. ([VW](#))
- Announced a new regional reporting structure where different brands will take responsibility for coordinating the Group's approach. VW will lead in the Americas and sub-Saharan Africa, SEAT will be responsible in North Africa, Audi will cover the Middle East and Asia Pacific except China, Škoda will be responsible for Russia and India. China is everyone's responsibility and Europe wasn't mentioned at all. ([VW](#))
- Audi is part of a consortium intending to test air taxis in Ingolstadt, Germany (Audi's home town). ([Audi](#))
- Invested \$100 million in solid state battery developer QuantumScape and formed a JV with the intent of mass producing solid state batteries by 2025. ([VW](#))
- Hyundai and Audi will jointly develop fuel cell technologies. Affiliates such as KIA and VW will have access to any benefits from the agreement. Hyundai implied that they had superior experience and technology to Audi, but that the potential business for Hyundai Mobis was a major factor in the partnership. ([Hyundai](#))
- A judge in one of the continuing cases into the Porsche acquisition of VW shares said investors could take action against VW majority shareholder Porsche SE, in addition to VW. ([Reuters](#))
- Ford and VW are exploring potential collaboration on a range of topics relating to commercial vehicles but stressed that equity arrangements and cross-ownership stakes were not under discussion. ([VW](#))

Other

- **Aston Martin** will open a new development centre at Silverstone and some posh offices in London. ([AML](#))
- A Shanghai-based car maker, thought to be **GLM**, is building a factory based on additive manufacturing, rather than traditional manufacturing techniques. The production method is a sort of spaceframe. ([3D Printing Industry](#))
- **Local Motors** announced a restructuring of its parent, now branded LM Industries to offer tailored design and manufacturing of vehicles based on the Olli platform. One of its projects is an autonomous battlefield vehicle for the US Marine Corps. ([Local Motors](#))
 - Implication: Although the company's offering is not hugely different from those of existing bodybuilders, the extent of potential modification, combined with the ability to order small batch runs from various locations (and ultimately vary in scale) might be very attractive to customers such as the military who are used to paying high prices, but demand substantial customisation.

News about other companies and trends ...

Economic / Political News

- **US** President Trump wants a 20% tariff on car imports (mainly from the **EU**) "soon". The issue is wider than the automotive trade balance and it is unclear what OEMs can do to resolve the situation. ([Economic Times of India](#))
 - Implication: Despite many European brands having US factories, economies of scale have led them to source entire vehicle lines and treat the plants as currency, rather than tariff, hedges. Recent weeks have also shown the political goodwill to be insufficient to shield the industry in the US.

Suppliers

- **ZF** have developed a new drivetrain that combines an automated manual transmission with an electric motor. This gives the normal benefits of light electrification and overcomes the primary downside of automated manual transmissions (the noticeable lag in changing gear). The result is a system that improves fuel economy and creates cost savings to partially offset the electrified technology. ([ZF](#))
- Manufacturing engineering company **FFT** will be acquired by Chinese company **Fosun**. ([Deal Street Asia](#))

- **Varroc Lighting Systems** acquired a smaller Turkish supplier. ([Autocar](#))
- **Continental** is establishing an artificial intelligence research lab within the German Research Center for Artificial Intelligence (**DFKI**). ([Continental](#))

Dealers

- According to a consultancy report, UK dealers are fast aligning diesel used car inventory with new car demand. In May 2017, diesel made up 57% of stock, by May 2018, it had dropped to 50%. ([Motor Trader](#))

Ride-Hailing, Car Sharing & Rental (history)

- **Uber** is trialling a fare discount, if the rider will agree to a longer wait for their cab. ([Quartz](#))
- **Uber's** CEO suggested a levy on ride hailing in New York to compensate taxi drivers who paid (in retrospect) high prices for their operating licences. ([Business Insider](#))

Driverless / Autonomy (history)

- US crash investigators said the **Uber** safety driver involved in the fatal crash was not looking at the system interface, as they had claimed, instead phone records apparently show that they were streaming a talent competition on their phone. ([Wired](#))
 - Implication: If safety drivers prove to be an unsatisfactory last resort then self-driving companies risk falling foul of a chicken and egg situation regarding road worthiness. Closed course driving, simulation and passive mode on-road testing could continue but the rate of learning would drop dramatically, and some situations would be impossible to confirm (because the effect of the vehicle's decisions on other users is difficult to predict and therefore simulate)
- US regulators told the company behind "Autopilot buddy" to stop selling it. The \$199 accessory is put onto the steering wheel to defeat **Tesla's** safety measures (checking drivers are holding on to the steering wheel). ([The Verge](#))
 - Implication: This is a further, worrying, development in autonomous driving. Customers and third parties are proving happy to perform what they see as hacks, but in reality defeat safety devices. Given the mounting evidence of people coming up with ways to force autonomous control, could this spell doom for L2 and L3 devices? The safer bet for regulators might be to ban the devices altogether rather than risk mis-use (Elon Musk and others would argue that, on average, safety is still improved even with reckless usage).
- Israeli start-up **TriEye** said it was developing an infra-red sensor that could be integrated into cameras, helping them to detect in objects where current performance is very poor (such as mist or dust). ([Globes](#))
- **Ford** believes self-driving delivery vehicles have greater application in the suburbs than built-up areas. ([PC Mag](#))
- **PSA** believes that 120 million km of test mileage are necessary to verify self-driving on highways -- with greater distances required for rural roads and cities. ([PSA](#))
- A group of hackers published a series of images from **Tesla's** Autopilot overlaid with system categorisation and radar data. Their analysis reveals previously unknown shadow capabilities of Autopilot (e.g. how good it is at tracking stopped vehicles) and provide information on which cameras perform which detection role. ([Electrek](#))

Electrification (history)

- Deutsche Post said it intended to continue producing **Streetscooter** electric vans until at least 2020 but that the company did not want to be an automaker and was looking at options including an IPO or sale. ([FAZ](#))
- A research consortium led by the Japanese government said it is aiming for a \$90 per kWh battery pack cost for **solid state batteries** by 2030. ([Green Car Congress](#))
- A study by **AlixPartners** predicted that in 2030 battery electric vehicles will account for 20% of US sales, 30% in Europe and 35% in China. The assessment also concluded that the next wave of electric vehicles would cost OEMs \$255 billion, yet many would lose money on the new models. ([AlixPartners](#))
- China is reportedly developing a **new charging standard** capable of 900 kW. ([Inside EVs](#))
- CHAdeMO's **maximum rating** has been upgraded to 400 kW in a forthcoming generation of products. ([Inside EVs](#))
- **VW** invested \$100 million in solid state battery developer **QuantumScape** and formed a JV with the intent of mass producing solid state batteries by 2025. ([VW](#))