GlobalAutomakers

November 20, 2015

John Bozzella, Global Automakers' President and CEO, responses to Additional Questions for the Record submitted after the House Energy and Commerce Subcommittee on Commerce, Manufacturing and Trade October 21, 2015 hearing entitled "Examining Ways to Improve Vehicle and Roadway Safety."

The Honorable Michael C. Burgess, M.D.

1. **Mr. Bozzella, you testified that automakers are working to educate consumers on the cybersecurity and safety implications of after-market or third-party devices being plugged into the vehicle through the OBDII port. Are your members in discussions with any developers of those after-market or third-party devices to address cybersecurity implications of those products?**

   At this time, we are not aware of any direct discussions between automobile manufacturers and the developers of such aftermarket products; preliminary work is underway that would make such discussions productive. We believe it is important that developers and third party vendors take appropriate steps to design and manufacture secure products, particularly when providing connectivity to vehicles through the OBD-II port. We also believe aftermarket device companies that use or capture vehicle data should also consider the adoption of privacy principles similar to those embraced by the auto industry last November.

2. **Are any of your members currently working with State DMVs to help notify vehicle owners of open recalls?**

   There is evidence that providing notification to consumers during the vehicle registration process will help increase consumer awareness of the recall status of their vehicle and result in improvements in recall completion rates.

   Results from a survey conducted by Global Automakers and the Alliance of Automobile manufacturers show that a strong majority of consumers support this type of approach -- over 70 percent of those asked about this issue supported not only notification at registration, but also a requirement that recalls be remedied prior to registration.

   Global Automakers has had initial discussions with several stakeholders including the American Association of Motor Vehicle Administrators (AAMVA) to address some of the practical challenges that may need to be resolved in order to facilitate the provision of vehicle recall information to consumers through State DMVs. In addition to AAMVA, we have also met and discussed this issue with state legislators in California as well as the California DMV.

3. **What are ways the Subcommittee should consider to encourage the fastest deployment of vehicle-to-vehicle communications technology and other crash avoidance technologies?**

There are several ways that the Subcommittee could encourage the deployment of vehicle-to-vehicle communications technologies and other crash avoidance technologies. In the near future, NHTSA is expected to conduct a rulemaking to mandate the installation of Dedicated Short Range Communications (DSRC) technology in new vehicles, an action that Global Automakers supports. The Subcommittee could take additional steps to encourage the accelerated installation of aftermarket DSRC devices to increase the overall 'network effect' and benefits to consumers through this technology. Investments in intelligent infrastructure and connected vehicle pilot programs can be used to provide tangible real world applications and immediate benefits to those early adopters through innovative vehicle-to-infrastructure applications such as smart intersections and roadway departure prevention systems. The Subcommittee could provide a framework and authorize funding for NHTSA to initiate programs to increase public awareness of the benefits that these technologies could deliver. We are supportive of programs to evaluate and improve consumer information so that the benefits of the technologies already being provided on vehicles today can become more widespread. Finally, we believe the Subcommittee could encourage efforts to realize the potential fleet-wide greenhouse gas and fuel economy benefits from widespread DSRC technology penetration.

4. **How would a requirement on vehicle manufacturers to submit specific part numbers, names, and descriptions of all parts affected by a safety recall impact the manufacturer's ability to identify all affected VINs in a timely manner? What additional costs would this type of requirement impose on manufacturers?**

Under current regulations, when an auto manufacturer determines that a safety defect exists it notifies NHTSA and compiles a preliminary list of affected vehicles. Because the manufacturer must notify NHTSA within five days, it may not always be able to confirm the complete vehicle identification number (VIN) range of affected vehicles. In addition, while the suspected cause of the defect may be identified, manufacturers often must continue extensive technical due diligence to identify the root cause of the problem, refine or expand the VIN range and determine the remedy including the need, if any, for re-designed parts and tools to implement the repair. To the extent that the recall involves a specific component that has been determined to be defective, then submissions to the agency will include component information. Currently, this information is available to the public from NHTSA. We support legislation to require the transmission of component information, including parts numbers if available, in the current defect notification report required under section 573.6 of title 49. Such legislation should avoid the imposition of a new and more burdensome process that could impede manufacturers' ability to provide a remedy to the consumer as quickly as possible.

It is important to understand, however, that under the current statutory framework, a safety recall applies to the entire vehicle, not just a specific part. Simply knowing the part

number, name or description is normally not enough to ascertain whether a specific part is affected by a recall. It is often the case that a vehicle recall involving a certain part may actually not affect all parts that share a corresponding part number. As a result, publication of part number information alone may mislead those who try to rely on it. Therefore, it is critical that recyclers maintain the VIN together with the part as it moves through the recycling sales process.

5. **How often do regional recalls occur? What impact would the elimination of regional recalls have on the manufacturer's ability to prioritize repair parts to populations or geographic areas that are more vulnerable to a safety defect than others?**

While motor vehicle safety recalls are generally undertaken on a nation-wide basis, there may be certain circumstances where it is important to target the vehicles that should be remedied based on regional factors. For example, there may be environmental factors (such as temperature, the amount of snowfall, or level of humidity) that have a material impact on the defect at issue, or the defect itself is caused by environmental factors. In such circumstances, it is essential that manufacturers be able to prioritize the recall on those consumers most at risk.

6. **Within your membership, do you know how many automakers have one senior official responsible for safety within their corporate organization structure? If so, how does that individual currently interact with the rest of the organization and work to ensure that information submitted to NHTSA on safety issues is accurate?**

Our members are committed to maintaining a strong safety culture within their respective organizations. Approaches can vary, however, and companies can have either one person, or in some cases, several people closely coordinating to manage safety at all stages of the product lifecycle, from the research and development stage, to vehicle recall identification and remediation. With regard to vehicle recalls, designated safety officers, with advice from legal personnel, work to ensure that all information submitted to NHTSA on safety issues is accurate and submitted in a timely manner.

7. **How do auto manufacturers currently coordinate with NHTSA on publicizing vehicle safety recall notices? How typical is it for NHTSA to publicize a recall notice before the manufacturer has identified all affected VINs?**

In general, the vast majority of vehicle recalls are initiated by vehicle manufacturers. When a manufacturer notifies the agency of a safety related defect, the vehicle manufacturer will begin compiling a list of affected VINs so that it can begin the process of notifying consumers that may be impacted by the recall. Under current NHTSA regulations, notification must be made to consumers within 60 days. If the remedy is not yet available, an interim notification is required advising owners that a further notice will be sent when the remedy is available.

By regulation, manufacturers submit recall reports electronically to NHTSA through a web portal. After NHTSA acknowledges receipt of the report, this information becomes public. When this occurs, it is available to any interested person, including the news media. This often occurs before the manufacturer has completed compiling the information necessary to send its 60-day notices. Some manufacturers also announce recalls, knowing that their reports will be available on NHTSA's website.

8. Are there certain regulatory barriers in place right now that are preventing car companies from fully investing in crash avoidance technologies and other next-generation safety features?

It is important that the regulatory environment support the deployment of new and innovative technologies designed to improve safety and the environment. As vehicles become more sophisticated there is increased opportunity to leverage technology to enable drivers to perform the driving task more effectively. However, there may be challenges associated with existing regulations that limit the possible approaches that manufacturers can take to more conventional solutions. For example, it may be possible to use camera systems and in-vehicle screens or heads up displays to replace the functions of rearview/sideview mirrors typically installed on cars today; however, these may be prohibited by existing Federal Motor Vehicle Safety Standards (FMVSS) pertaining to rear visibility. In addition, advanced lighting systems that can improve driver visibility may be restricted due to outdated FMVSS lighting requirements. The regulatory systems should be adaptable to changes brought about through advanced technology.

Global Automakers also believes that the ongoing interest in reexamining the radio spectrum allocation for DSRC technology creates uncertainty and serves as a barrier to the deployment of this life saving technology. We encourage NHTSA and other relevant authorities to coordinate their activities so that the Agency can move forward with its rulemaking to mandate the deployment of this technology as quickly as possible; delays could ultimately deprive the public of these important safety protections.

A. How should we expect consumers to embrace advanced automotive technologies? Do consumers face any obstacles to adoption, such as cost?

The demand for advanced automotive technologies is often driven by the perceived benefits that a given technology provides to the consumer, whether it be through increased safety, fuel economy, or convenience. It is also important that consumers trust the technology, believe that the connectivity, which enables many of these technologies, in the vehicle is secure, and have confidence that their personal information is protected.

Increased awareness of the benefits of advanced automotive technologies is an important factor facilitating their adoption. Information about these

benefits and confidence that they will work as intended will enable consumers to determine whether or not to select certain advanced technology features when purchasing a new vehicle.

Of course cost is also a factor. Installing advanced technologies will increase the cost of a vehicle, especially at the outset when the economies of scale and related technology improvements are not yet available. If we want consumers to embrace this technology it will be important to help manufacturers find ways to reduce costs, such as through research and development. It is also important to make the value proposition for consumers more compelling by offering sales incentives, tax credits or other market-driven mechanisms (such as discounted insurance premiums) to increase demand.

B. What types of education should be provided to consumers to increase their awareness, understanding, and trust in crash avoidance technologies?

We agree that consumer education is critical to the success of advanced crash avoidance technologies. While manufacturers can provide helpful information on websites and dealers can provide greater instruction to purchasers at the point of sale, it is important to develop additional ways of increasing public awareness. Government programs such as the New Car Assessment Program (NCAP) can be used to highlight the availability of technologies that meet certain performance criteria; however, the information that is available on NHTSA's website must be presented in a way that is more accessible and can be more clearly understood.

We expect that NHTSA will issue a final decision proposing near term upgrades to the NCAP program based on feedback received from the public in response to an April 5, 2013 request for comment.

In addition, informational websites such as "mycardoeswhat.org" can provide consumers with useful background information on some of the features that they may want to look for in a new car.

9. Security researchers can play a valuable role in the discovery and mitigation of cybersecurity vulnerabilities in vehicles. What is the auto industry doing to work with the security research community to help identify and remediate cybersecurity threats in vehicles?

Vehicle manufacturers engage with third party security vendors, government programs and working groups, universities, and other research consortia. These relationships help automakers develop vehicle-specific security technologies and practices. In particular, Global Automakers and other auto industry representatives are engaging in the National

Telecommunications and Information Administration's (NTIA) Multi-stakeholder Process to Promote Collaboration on Vulnerability Research Disclosure that is working to develop voluntary principles guiding collaboration between vendors and researchers about vulnerability information and coordinated disclosure. Furthermore, the recently-established Automotive Information Sharing and Analysis Center (Auto-ISAC), once fully operational, will provide an additional mechanism through which cybersecurity researchers can submit vulnerability information.

In addition to the NTIA process and the formation of the Auto-ISAC, additional industry activities and partnerships include:

- Auto-specific hackathons such as the annual Battelle-SAE International CyberAuto Challenge;
- Participation in vehicle cybersecurity events such as the DEF CON, Black Hat, and Embedded Security in Cars (ESCAR) Conferences;
- The SAE Vehicle Electrical System Security Committee, which was created to help ensure electronic control system safety;
- The Automotive Consortium for Embedded Security (ACES), organized and operated by the Southwest Research Institute (SwRI);
- The auto industry has also engaged with the National Institute of Standards and Technology (NIST) National Cybersecurity Center of Excellence to develop research needs for vehicle cybersecurity. Automakers are working with DHS and DOT to develop an Automotive Cybersecurity Industry Consortium.

The Honorable Jan Schakowsky

1. **On July 24, 2015, General Motors announced that Chevrolet, Buick, GMC and Cadillac will offer 22 different crash avoidance technologies across their 2016 model year U.S. lineups. Under Section 502 of the discussion draft, GM could receive three or more grams per mile in greenhouse gas (GHG) emissions credits for each of those technologies. That would mean that a GM vehicle that carries all 22 active safety technologies could receive at a minimum 66 grams per mile in GHG credits.**

   Similarly, Section 503 of the draft would grant manufacturers Corporate Average Fuel Economy (CAFE) credits in exchange for installing certain safety technology onto their vehicles. It seems to me that the combined environmental impact of 66 grams per mile in GHG emissions credits and equivalent credits toward meeting CAFE standards for every one of those vehicles could be significant.

   A. For each of your member companies, how many crash avoidance technologies per vehicle model are planned to be offered each model year from 2016 through 2021?

Global Automakers' members are among the industry's leaders in pioneering the life-saving technologies addressed in Title V of the Discussion Draft. Global Automakers believes that finding ways to democratize these technologies across vehicle fleets is a worthwhile discussion to have. However, it would not be appropriate for Global Automakers to collect future product planning information from our members who are marketplace competitors; therefore, we are unable to provide a specific answer to this question.

B. **Should the number of GHG and CAFE credits that manufacturers can receive under Title V of the bill be capped at a particular number of credits? If so, what should the cap be for GHG credits and for CAFE credits?**

Global Automakers believes it is important to recognize that widespread penetration of vehicle-to-vehicle communications technology and other crash avoidance technologies may yield significant improvements in fleet-wide fuel consumption and hence greenhouse gas emissions. However, we have no position on the credit program or cap, as outlined in the Discussion Draft, at this time.

C. **In your testimony, you state that Title V of the discussion draft would "incentivize the adoption of these advanced technologies." GM, however, has already elected to offer 22 different crash-avoidance technologies on thousands of its vehicles without the possibility of GHG or CAFE credits as an incentive. Please explain why GHG and CAFE credits are necessary to incentivize safety when vehicle manufacturers are already including advanced technologies in their vehicles?**

Automakers must make numerous decisions regarding vehicle planning and the deployment of new technology. There are many reasons automakers may elect to offer certain features in a vehicle model at a particular time. The draft bill describes one way to accelerate the deployment of advanced vehicle technologies across the entire vehicle fleet. Global Automakers agrees with the concept of encouraging the rapid deployment of vehicle technologies; specifically we support policies that encourage the expedited installation of DSRC.

The Honorable Adam Kinzinger

1. **Previously your trade association informed me that it is willing to "explore ways to facilitate the removal of defective parts taken from recalled vehicles from the stream of commerce." Can you update the committee on where this exploration exercise stands?**

Global Automakers remains committed to this objective and to that end has had discussions at the staff level and one CEO-level meeting with the Automotive Recyclers

Association (ARA). We felt the meeting was productive, and we agreed to engage further with the ARA on this important question.

2. **Earlier this year, Sec. Foxx recommended that automotive manufacturers should provide part number information in an efficient and easy-to-use format directly to recyclers and others who need the information to support auto safety. Do you support this approach? What barriers are there to implementing this recommendation?**

Global Automakers believes all defective parts should be removed from the stream of commerce.

Under current regulations, when an auto manufacturer determines that a safety defect exists it notifies NHTSA and compiles a preliminary list of affected vehicles. Because the manufacturer must notify NHTSA within five days, it may not always be able to confirm the complete vehicle identification number (VIN) range of affected vehicles. In addition, while the suspected cause of the defect may be identified, manufacturers often must continue extensive technical due diligence to identify the root cause of the problem, refine or expand the VIN range and determine the remedy including the need, if any, for re-designed parts and tools to implement the repair. To the extent that the recall involves a specific component that has been determined to be defective, then submissions to the agency will include component information. Currently, this information is available to the public from NHTSA. We support legislation to require the transmission of component information, including parts numbers if available, in the current defect notification report required under section 573.6 of title 49. Such legislation should avoid the imposition of a new and more burdensome process that could impede manufacturers' ability to provide a remedy to the consumer as quickly as possible.

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