

making available data stream information related to normal vehicle operation. The Alliance and AIAM further commented that they do make this information available when it is directly related to diagnostics, but there are instances where scaling of this information may be different and the data may be combined differently with other data values. The Alliance and AIAM request that EPA clarify that only data stream information required for diagnostic purposes, and not the redundant data stream information used for normal operation, be made available to equipment and tool companies.

BMW commented that they interpret section (g)(12) as requiring OEMs to provide generic scan tool companies information needed to enable scan tools. BMW commented that it was in agreement in principle with these sections but needed clarification. In particular, BMW comments that sections (g)(11) and (g)(12) of the proposed regulatory language appear to be contradictory. In section (g)(11) of the proposed regulatory language, EPA proposed that OEMs make available reprogramming procedures, including "information on application physical interface (API) or layers (*i.e.*, processing algorithms or software design descriptions for procedures such as connection, initialization, performing and verifying programming/download, and termination)". In addition section (h)(1)(vii)(A), (B), and (D) specify additional reprogramming-related information. However, section (12)(ii) seems to intend that OEMs provide information for generic scan tools to work with 1996 and later model year vehicles, and proposes that the same list of information be released for both reprogramming and generic scan tools. BMW commented that scan tool companies only need data stream information to enable capture and readout of generic and enhanced fault codes and reprogramming information is not necessary for developing generic diagnostic scan tools.

BMW is opposed to the release of any information to equipment and tool companies that would allow them to incorporate reprogramming capabilities because BMW considers this information to be proprietary information and BMW sees an extensive need for verification of these tools. In addition, BMW is able to implement the SAE J2534 specification for its 1999–2003 model year vehicles and can comply with the required release of information to the equipment and tool companies the information described above for the extra cable to allow for reprogramming of their vehicles. BMW

commented that they do not have the resources to support tool and equipment companies who face challenges in developing these reprogramming tools.

BMW also made recommendations as to how section (g)(11) and (g)(12) should be rewritten to more clearly address what BMW believes EPA intends to accomplish.

EPA Decision: In response to BMW's comments, several clarifying points should be made. In paragraphs (g)(11) and (g)(12) of the proposed regulatory language, EPA proposed two distinct provisions to deal with two distinct issues. In paragraph (g)(11), we proposed that OEMs make available certain information to equipment and scan tool companies to allow for them to incorporate the reprogramming capability into aftermarket scan tools prior to the implementation of the pass-through reprogramming requirement (*i.e.* SAE J2534) in order to cover 1996–2002 model year vehicles. In paragraph (g)(12), we proposed that OEMs make an increased level of enhanced diagnostic information available to aftermarket to companies. In the 1995 regulations, EPA finalized a rather generic provision that required OEMs to make available enhanced diagnostic information to the equipment and tool companies for incorporation into aftermarket tools. Other than specifically noting that emissions-related data stream information be included, we left the interpretation up to the OEM as to what was considered enhanced diagnostic information. We found that the few OEMs who chose the option of releasing information to equipment and tool companies (rather than make their OEM specific tool for sale which was the other option available to OEMs and the one that most chose to meet the scan tool requirement) had different interpretations of what was considered "enhanced diagnostic information." As a result, there was a fair amount of difference among the OEMs in the information made available to equipment and tool companies. In addition to the variety of interpretations of "enhanced diagnostic information", our experience in implementing the 1995 rule highlighted that there are very specific pieces of information needed by equipment and tool companies to ensure that aftermarket tools perform to their maximum capacity. As a result, equipment and tool companies were not able to develop aftermarket tools that adequately performed the enhanced diagnostic functions found in OEM tools. Therefore, we proposed more specific provisions for two important reasons. First, we believe it is necessary to increase the consistency of

information that is released to aftermarket tool companies across OEMs to address some of the gaps we believe currently exist. Second, we believe a higher level of information is needed by aftermarket scan tools to increase the functionality of the aftermarket scan tools that are heavily relied upon by independent technicians. EPA is not finalizing a provision that will require OEMs to release the information that was proposed in the NPRM unless they cannot use SAE J2534 methods on 1996 to 2003 model year vehicles. Therefore, we believe BMW's concerns about section (g)(11) of the proposed regulatory language have been addressed.

With regard to the release of information to equipment and tool companies, we agree with BMW that there does appear to be some confusion in the lists of information that EPA proposed for both the reprogramming and generic and enhanced scan tool information sections in the regulatory language. In fact, the lists as proposed in these sections of the regulatory language contain some factual and typographical errors which are corrected here and in the final regulatory language. In sections (g)(12)(ii) and (f)(12)(ii) of the proposed regulatory language ("Reprogramming Information"), we included language that would require OEMs to make available to equipment and tool companies the necessary calibrations via CD-ROM, diskette, or the Internet (item E). This particular piece of information is one that would be purchased by an aftermarket service provider to complete a reprogramming event and therefore belongs in the "Reprogramming Information" section of the final regulatory language, which can be found in sections (g)(12) and (f)(12) of the regulatory language. Ultimately, we believe that the information we proposed to be made available is necessary for equipment and tool manufacturers to develop aftermarket scan tools with the same sophisticated functionality as is provided to dealerships using an OEM scan tool. In addition, we believe that the list of information we are finalizing today is not proprietary in nature and therefore should not concern OEMs. Therefore, we will finalize a provision that requires the OEMs to make available to equipment and tool companies the following information.

(A) The physical hardware requirements for data communication (*e.g.* system voltage requirements, cable terminals/pins, connections such as RS232 or USB, wires, etc.)

(B) ECU data communication (*e.g.* serial data protocols, transmission speed