Drive-By-Wire RFI Addendum: Clarification for Question 9.6

Q1. What was the USG trying to understand with Question 9.6?
The USG is exploring a future strategy where software-defined subsystems (drive-by-wire kits, autonomy stacks) may be acquired separately and integrated onto legacy platforms. As these platforms evolve toward software-defined steering, braking, or throttle systems, the USG seeks to understand how a vendor's DBW solution would need to adapt architecturally, functionally, or operationally.

Q2. Why is the USG asking about “changes” to DBW solutions?
The USG aims to gauge how much redesign or adaptation may be required for DBW systems to remain compatible as platforms transition away from traditional mechanical or hydraulic actuation and toward more software-centric control methods.

Q3. Does the USG expect DBW vendors to redesign their hardware or software?
Not necessarily. The USG is asking vendors to describe any architectural or functional changes that might be required when integrating into platform(s) that may utilize software-centric interfaces instead of direct hardware access.

Q4. What types of information would be most useful in industry responses?
Examples include strategies related to:
- Decoupling of hardware and software
- Support for continuous integration and deployment (CI/CD)
- Enhanced safety and redundancy (assured DBW, fault detection, cyber resilience)
- Integration with autonomous driving software / high-performance computing
- Simulation-driven development workflows
These examples are not requirements but represent the types of capabilities the USG is assessing.

Q5. Is the USG asking for compliance with any specific standards?
No. Question 9.6 does not imply new standards. The purpose is to understand vendor readiness for future architectures, not mandate adherence to particular certification frameworks.

Q6. Should vendors respond even if they do not currently support software-defined vehicle architectures?
Yes. Vendors may describe their current state, areas requiring modification, known constraints, or information needed from the USG. Responses such as “no change anticipated” or “requires further study” are acceptable.