

Unlocking the Potential of IVHM Technology

JA6268 Recommended Practice: "Design & Run-Time Information Exchange for Health-Ready Components" was published by the SAE International HM-1 Committee on April 2, 2018. This document is designed to reduce barriers to implementing Integrated Vehicle Health Management (IVHM) technology in the aerospace and automotive sectors by introducing "health-ready components."

What is a Health-Ready Component? Health-ready components are supplier-provided components or subsystems which have been augmented to monitor and report their own health or alternatively, those where the supplier provides the integrator sufficient information to accurately assess the component's health via a higher-level system already on the vehicle. This is key to unlocking the potential of IVHM!

Why is industry awareness important? IVHM technology has the potential to provide significant business benefits in terms of performance, availability, and safety. To date, the level of deployment in aerospace and automotive domains has been limited with respect to higher end functionality such as predictive analytics or prognostics. One of the main barriers is the lack of uniform information sharing methods between OEMs and their suppliers. Thus, there is a window of opportunity to move proactively to accelerate IVHM implementations and avoid unnecessary proliferation of different approaches which would be costly and counterproductive. JA6268 is a recommended practice designed to capture this opportunity now.

"Health-Ready Components on the 787 are enhancing Fleet performance and enabling customer support efficiencies today. This initiative has great potential. Keith Sellers, 787 Fleet Chief, Boeing

"We really need better mechanisms like JA6268 to engage our supply base to bring IVHM into the mainstream." Frank Kramer, Technical Specialist, Airbus





"We believe that the most effective path to full implementation of IVHM/PHM technology must include robust best practices for exchanging design and performance information with our supplier partners." Barbara Leising, Director Global Aftersales Diagnostics & Electrical Engineering, General Motors

"As a supplier of automotive electronics, I believe that IVHM technology will be critical to the ultimate success of autonomous vehicles and we look forward to further collaboration with the OEMs to advance that goal." Andre Kleyner, Global Reliability Engineering Leader, APTIV

Join the consortium to unlock the potential of IVHM. A Health-Ready Components & Systems (HRCS) Consortium will provide an industry neutral forum for developing strategies and processes for the recommended practices contained in JA6268 and other related standards. The HRCS Consortium enables the uniform exchange of design and run-time data between suppliers and integrators, promotes the development and deployment of Health-Ready components, and advances IVHM implementation in aerospace, automotive, and other industries. If you are interested in participating please contact us at info@sae-itc.org.

HRCS is a program of SAE Industry Technologies Consortia (SAE ITC), a trade association affiliated with SAE International.

