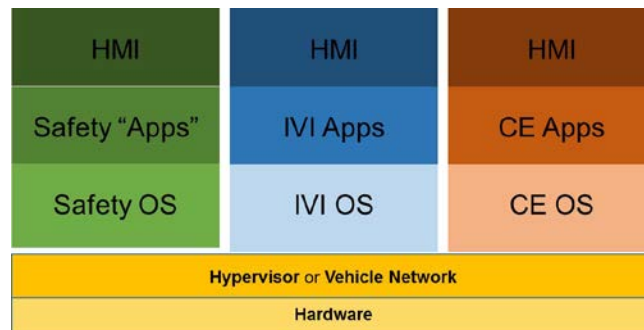




Bridging Car Software Domains to Create a Unified In-car Experience

Many automakers and their software suppliers are actively discussing ways of integrating vehicle software domains (e.g., safety, infotainment, consumer electronics) to present a more unified experience to drivers and passengers of their future vehicles. In an effort to consolidate these discussions, the GENIVI Alliance has launched a [vehicle domain interaction strategy](#) to identify and deliver standard interfaces (APIs) and approaches to this well-known industry challenge. The [projects](#) launched under this strategy are open to GENIVI members and to non-members with specific domain software expertise in safety and consumer electronics domains.



System on a chip (SOC) consolidation is one of many trends that have provided in-vehicle software companies immense opportunities to combine historically siloed features to deliver a more complete driver awareness offering.

Automotive Trends Meet Open Technology

The trends behind the new GENIVI [vehicle domain interaction strategy](#) are some of the many technology advances that GENIVI is exploring and aligning to in order to help automakers and their suppliers define and deliver the in-vehicle experience of the future. The GENIVI open development community is committed to identifying and aligning to these future trends, and then delivering open solutions that can be adopted into both open source and commercial products included in future production programs of global automakers. An open community context for these discussions is essential because while GENIVI recognizes that it has a robust and global membership; other experts are needed at the table like Google/Android, QNX, and other software providers. Thus, GENIVI welcomes all participants into its open community projects where requirements can be identified and solutions delivered that align to current and future trends.

Vehicle domain interaction is just one of many initiatives GENIVI is driving along with others founded on leading trends including advanced user interfaces, software-over-the-air (SOTA), car-to-cloud connectivity and entertainment in autonomous vehicles. In fact, GENIVI has delivered an open software platform for the





connected vehicle and city allowing secure and robust vehicle-to-city connectivity and information exchange. Currently underway, the [GENIVI-Las Vegas Connected Vehicle Pilot](#) demonstrates the value of linking vehicle data with city-hosted traffic and pedestrian safety data resulting in actionable information that is displayed to the driver.

A Win-Win for All

GENIVI members and non-members engaging in the open dialog to create and deliver a set of open, standard solutions and interfaces (APIs) is a win-win for those organizations. Additionally, there are several positive benefits to the automotive industry of a successful vehicle domain interaction strategy and similar trend-based collaborations:

- Consistent employment of the defined interfaces for cross-domain functionality, data management, and other needs.
- A more efficient development, improved testing and quality, and ultimately, more choice for buyers of the solutions through use of a consistent standard.
- The cross-organizational collaboration required to define the interfaces will bring the industry together in a more productive and mutually-beneficial way, reducing redundant work across multiple organizations.

The GENIVI Alliance is a global collaborative community of more than 140 companies, including automakers and their suppliers, with the shared goal of developing open software for In-Vehicle Infotainment (IVI) solutions and the connected car. The Alliance's work is informed by automotive trends and results in standard interfaces and software that shorten development cycles, speed time to market, and reduce costs for companies leveraging open software. To learn more about the GENIVI Alliance, please visit GENIVI.org.

