

The Alliance's Driver Focus Guidelines: Managing Driver Distraction through System Integration

- **For years automakers have worked to help drivers focus on the road. In fact, by 2003 Alliance member companies voluntarily developed and began implementing guidelines for integrated advanced information and communications systems.** These Driver Focus – Telematics (DF-T) Guidelines were developed in consultation with ITS America, the Consumer Electronics Association, the National Safety Council, the Society of Automotive Engineers, AAA and as observers, the National Highway Traffic Safety Administration and Transport Canada. The complete guidelines can be found at www.autoalliance.org/driverfocus and www.autoalliance.org/driverfocusfacts (media information page).
- **These are highly-developed design and performance guidelines for in-vehicle systems, and the industry is committed to updating them as we continue learning more about driver behavior.** The guidelines cover the design, use and installation of telematics systems through 24 principles focused on helping drivers keep their “eyes-on-the-road.”
- **Data is essential, and through continued research and ever-evolving understanding of how drivers visually and manually interact with their vehicles, each principle in the guidelines includes examples, evaluation criteria, verification procedures and citations to supporting peer-reviewed research.** The DF-T guidelines address many factors in ways that optimize auto features for use in one, single, environment: the driving environment. Take “eyes-on-the-road,” for example:
 - **The Virginia Tech Transportation Institute's (VTTI) 100-Car Naturalistic Study found that the odds of a crash or near-miss more than doubled when a driver's eyes were off the road ahead for more than two seconds.** The Alliance's DF-T guidelines specify that displays must be mounted high enough in the vehicle so drivers can continue seeing the roadway with their peripheral vision, even while glancing at the display. The guidelines also limit the amount of visual and manual demand that any particular task can impose on a driver. The demand must be equal to that of tuning an older-style radio – a common task that historically has not caused excessive driver distraction.
 - **Research has shown that some types of display content are more distracting than others.** The guidelines call for displays to suspend dynamic images in a moving vehicle. That means that entertainment content that might distract a driver is not displayed while the vehicle is in motion.

➤ **The 24 driver focus principles are divided into five groups.**

Installation: For example, no part of the system should obstruct the driver's field of view. *(So, a display won't be mounted above the instrument panel, which would possibly interfere with the driver's view of the road.)*

Information Presentation: For example, where appropriate, internationally agreed upon standards or recognized industry practice relating to legibility, icons, symbols, words, acronyms, or abbreviations should be used. *(Meaning that when automakers design user controls, they commonly use legibility criteria, symbols and abbreviations recognized by the International Standards Organization.)*

Interactions with Displays and Controls: For example, in general the driver should be able to control the pace of interaction with the system. The system should not require the driver to make time-critical responses when inputting information. *(That means a driver should be able to stop entering information into a vehicle system at any point, without the system "timing out" and going back to the starting point.)*

System Behavior: For example, visual information not related to driving that may take the driver's attention away from the road may be disabled when the vehicle is in motion. Or, it may be presented in a way not viewable to the driver when the vehicle is in motion. *(So entertainment functions and automatically scrolling text, or many moving images are "locked out" while the vehicle is moving, or are displayed in a way that prevents the driver from watching while driving.)*

System User Information: For example, the instructions should distinguish clearly between those aspects of the system that are intended for use by the driver while driving, and those that are not intended to be used while driving. *(That means the vehicle display, as well as the owner's manual, clearly indicate which menus, features and commands are not available when the auto is moving.)*