

**CR Number:** 4778

**External Reference:**

**Category:** CVISN - National ITS Architecture

**Component:** CVISN Architecture and Standards

**Synopsis:** Update CVISN Architecture to better address Expanded CVISN capabilities.

**Status:** Open

**Disposition:** [2006-10-19] Open.

**Description:** As part of the CVISN program, the Federal Motor Carrier Safety Administration (FMCSA) defined an initial set of capabilities that could be deployed incrementally by a state and its motor carriers. Those “Core CVISN” capabilities focus on electronically exchanging safety and credentialing information, electronically processing interstate registration and fuel tax credentials and filings, and implementing transponder-based roadside electronic screening at one fixed or mobile site. The Expanded CVISN initiative builds on Core CVISN to continue to enhance the safety, security and productivity of commercial vehicle operations and to improve access to and quality of information about commercial vehicle operations for authorized public and private sector users. Through extensive outreach in 2004, FMCSA engaged stakeholders to identify the capabilities necessary to achieve the goals of Expanded CVISN. This CR proposes changes to the CVISN Architecture and the National ITS Architecture to better support Expanded CVISN capabilities.

New Terminators:

\* Driver Identification Card - This terminator represents the portable entity (e.g., a smart card) that enables the transfer of electronic identification information about a driver. This may include license information, biometrics, and other data to identify the driver.

New Architecture Flows:

\* cv driver credential – Information (e.g., identity, biometrics, address, date of birth, endorsements, restrictions) stored on a driver’s license or other official identification card used to identify a driver of commercial vehicles. Normally the card will be issued by a government agency (e.g., a state driver licensing agency).

\* cv repair status – Information about the completion of a repair to a commercial vehicle.

\* cv driver record – Information typically maintained by a state driver licensing agency about a driver of a commercial vehicle including driver identification data, license data, permit data, and driving history details.

\* cv driver record request - A request for information about a commercial vehicle driver.

Modified Subsystem description: Commercial Vehicle Check System (CVCS)

Modified Equipment Package (EP) Name: CV Safety and Security Administration

Modified EP descriptions: CV Information Exchange, CV Safety and Security Administration, Credentials and Taxes Administration, Fleet Administration, Manage CV Driver Identification, Citation and Accident Electronic Recording, Roadside Safety and Security Inspection

Added EP: In-Vehicle Signing System

Modified architecture flow descriptions:

\* safety status information – Safety information such as safety ratings, security ratings or flags, inspection summaries, and violation summaries. A unique identifier is included. Corresponds to the safety and security portion of CVISN "snapshots." The status information may be provided as a response to a real-time query or as a result of a standing request for updated information (subscription). This may also include information about non-U.S. fleets for use by U.S. authorities, and information regarding U.S. fleets made available to Mexican and Canadian authorities. The query flow is not explicitly shown.

\* credentials information – Response containing full vehicle fuel tax and registration credentials information. "Response" may be provided in reaction to a real-time query or a standing request for updated information. The query flow is not explicitly shown.

Flows added to the CVISN Architecture Flow Diagram:

accident report: CVAS to CVCS

accident report: CVAS to Other CVAS

accident report: Other CVAS to CVAS

alerts and advisories: Alerting and Advisory Systems to CVAS

alerts and advisories: Alerting and Advisory Systems to CVCS

citation: CVAS to CVCS

citation: CVAS to Other CVAS

citation: Other CVAS to CVAS

commercial vehicle disable: CVSAg(CVS) to CVCS

cv driver record: CVAS to CVCS

cv driver record: CVAS to CVOIR

cv driver record: CVAS to FMS

cv driver record: CVAS to Other CVAS

cv driver record: Other CVAS to CVAS

cv driver record request: CVCS to CVAS

cv driver record request: CVOIR to CVAS

cv driver record request: FMS to CVAS

cv driver record request: CVAS to Other CVAS

cv driver record request: Other CVAS to CVAS

cv driver credential: Driver ID Card to CVCS

cv driver credential: Driver ID Card to CVSAg(CVS)

cv driver credential: Driver ID Card to FMS

cv repair status: FMS to CVAS

expected driver identity characteristics: CVSAg(CVS) to CVCS

freight breach: CVCS to EA

freight equipment information: CVSAg(CVS) to CVCS

These changes will be reflected in the CVISN Architecture document. In that document, the architecture flows will also be mapped between specific equipment packages (new Table 2).

[2006-10-19] Presented at the 10/19/06 ACCB meeting.

Attendees recommended that this be approved. The CR will be posted to the CVISN System Architects' listserv for an additional 30-day comment period.

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IMPACT SUMMARY:

ACCB Items:

1. CVISN Architecture Flow Diagram
2. CVISN Architecture Document

**Fix:**

**Comment:**

**Attachment  
names:**

**Responsibility:**

**Modified Time:** 10/19/2006 6:06:36 PM

**Modified By:** Salazar Sandra B

**Entered On:** 10/12/2006 8:10:30 AM

**Entered By:** Magnusson Nancy C

**Severity:** Medium

**Priority:** No

**Type:** Adaptive Change

**Closed On:**