

R11. E-Screening Applications

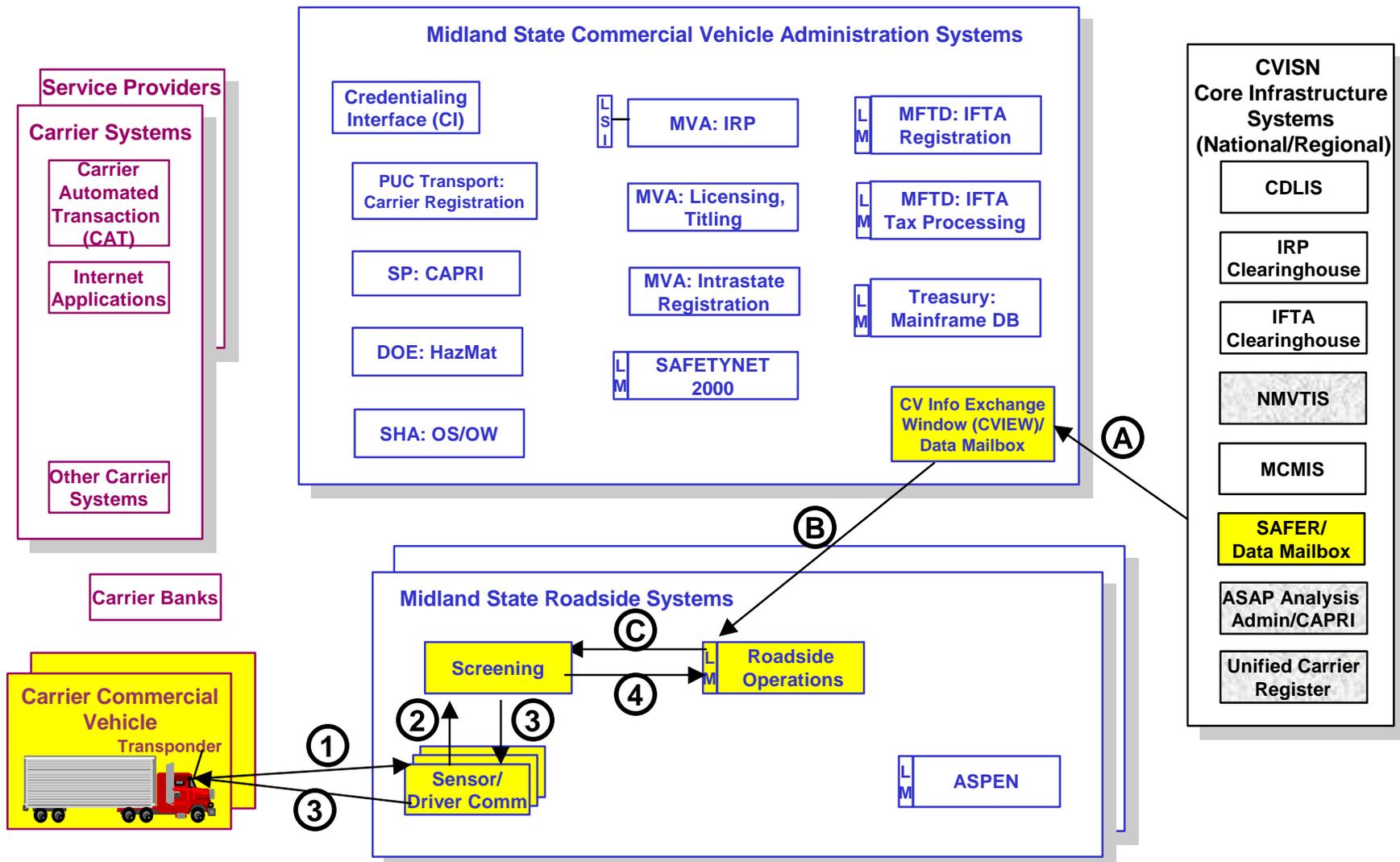
UNDERSTANDING ITS/CVO TECHNOLOGY APPLICATIONS

Reference Manual

MODULE 11 - APPLYING THE TECHNOLOGIES TO SCREENING PROBLEMS



Improved operational scenario: Screen Vehicle Electronically



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A - C are steps that occur ~ daily for the site

- A. SAFER sends subscription updates to the state CVIEW for carrier and vehicle snapshots, based on state-specified subscriptions. These snapshots are sent as TS 285 transactions. (See reference manual for summary of standards that apply to screening applications)
- B. CVIEW distributes carrier and vehicle snapshots to roadside sites, also based on specified subscriptions. These are also sent as TS 285 transactions.
- C. Site operators may interact with ROADSIDE OPERATIONS to control local screening criteria, which will be based on the snapshot information. The resulting carrier and vehicle specific screening “scores” or values are sent to the new screening system. This is a local interface which is not subject to standards.

1 - 4 are steps that occur in real time for each vehicle

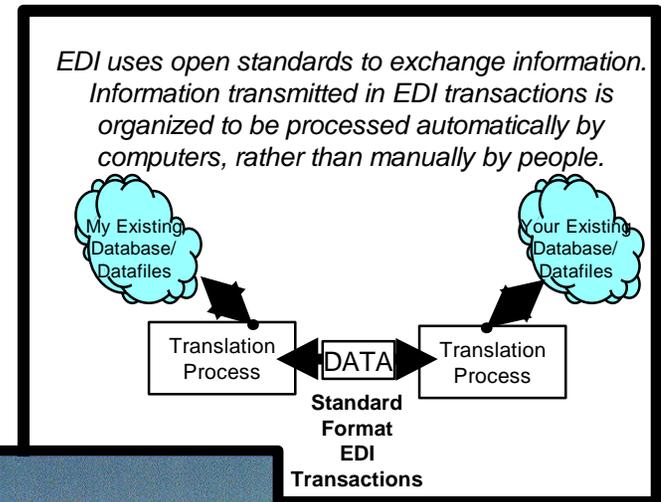
- 1. Carrier and/or vehicle specific identifiers are transmitted from the DSRC transponder on board the COMMERCIAL VEHICLE to the Sensor/Driver Communications interface using the ASTM 17.51 Layer 1 and Layer 2 standards.
- 2. The identifying information is extracted from the DSRC message in accordance with the IEEE P1455 message set for use in the SCREENING system. A screening decision is made.
- 3. The screening decision is communicated back to the driver, again using the ASTM 17.51 standards and the IEEE P1455 message set.
- 4. Screening information is communicated back to ROADSIDE OPERATIONS for use by site staff. This may be a non-standard interface.

Discussion: Interface Standards

What interface standards are required to support this screening scenario?

- EDI?
(computer-to-computer, across boundaries)

- DSRC?
(vehicle to roadside)



Discussion: Interface Standards

- EDI:

- Snapshots (TS 285, 997)

- DSRC:

- Hardware (ASTM draft 6 & 7)
- Messages (IEEE P1455)

