

7. INTEROPERABILITY ISSUES/STATUS

The interoperability issues related to Credentials Administration are concentrated on the ability to exchange credentials information and relate it to other information. Different legacy systems typically use different identifiers as look-up keys. The white paper on standard identifiers (Reference 16) provides detailed guidance on establishing a workable approach.

7.1 Issues

1. How will credentials-related identifiers be cross-referenced to safety-related identifiers?

First, an assessment of interstate carrier identifiers: For safety purposes, the United States Department of Transportation (USDOT) number is the main identifier (ID). For the International Fuel Tax Agreement (IFTA), the taxpayer ID is the main identifier. For the International Registration Plan (IRP), the IRP account number is used. The MCS-150 form captures many key identifiers (USDOT number, motor carrier operating authority number issued by the Federal Highway Administration or Interstate Commerce Commission, Dun & Bradstreet business number, taxpayer identifier) for carriers. Data from the MCS-150 are entered into the Motor Carrier Management Information System (MCMIS) database. The data from MCMIS is entered into the Safety and Fitness Electronic Records (SAFER) snapshot database. From a user's point of view, the SAFER/CVIEW systems make the information accessible electronically. However, at this time, there is no requirement to keep that part of the MCMIS database up to date.

Under the Performance and Registration Information Systems Management (PRISM) processes, each vehicle must be associated with a safety carrier (using USDOT number to identify the carrier). The carrier's safety record is checked when the vehicle is registered. This provides an annual opportunity to confirm the carrier ID associated with each vehicle, and hence, to tie safety and IRP data together.

IFTA registration allows, but does not usually require that the USDOT be captured. If applicants routinely supplied the USDOT number, then a linkage between safety and IFTA data could be established.

The availability of all related identifiers for a given intrastate carrier in a single state system varies from state to state. Until all intrastate carriers are assigned USDOT numbers by a similar mechanism to that used today for interstate carriers, it will be difficult to assemble the cross-reference in the SAFER/CVIEW snapshots.

Cross-referencing credentials and safety data will require a concerted effort. Linking the data together provides a better opportunity to identify high-risk operators. The snapshot should be used to collect all identifiers for all carriers. The CVO community should adopt a primary identifier for each CVO entity (e.g. motor carrier, commercial vehicle, etc.); such an identifier would permit a cross-reference between two databases that are designed around

different physical identifiers. Use of the primary identifier in all exchanges that update carrier snapshot updates should help to establish the cross-reference between the primary ID and other IDs for the same carrier.

2. What must be done to use “electronic signatures?”

State procedures generally require original signatures on paper documents for:

- carrier certification that application content is accurate
- affidavits for a variety of purposes including application for refunds
- power of attorney to allow a third party to act on behalf of the carrier

The Electronic Signatures in Global and National Commerce Act was approved by Congress and signed into law in June 2000. The digital signature bill gives an electronic signature entered over the Internet the same legal validity and effect as a traditional signature on paper. While digital signatures are legally valid and must be accepted by all states, the states will need to determine precisely how contracts are carried out. The intent of the legislation was not to overturn state contract laws, but simply to give a baseline.

Digital signature technology is viable but immature

- public key/private key cryptography
- digital certificates
- hardware keys/smart cards
- biometric methods
- user id & personal identification number (PIN)

Simple approaches are readily available that probably provide higher security than is provided by current paper base level. Electronic processes require an electronic signature (or substitute) to be a replacement for pen and paper systems if the full benefits of automation are to be received. Technologies for electronic or digital signatures exist and this technology is evolving rapidly, now that the digital signature bill has become a federal law. States should position themselves institutionally to be able to evolve with the technology. That means that states may need to change laws to allow electronic signatures. States should not legislate a specific technology solution. The electronic data interchange (EDI) Trading Partner Agreement can be used to define the rules for signatures, affidavits, certifications & power of attorney.

3. How are CVISN states going to deal with the Heavy Vehicle Use Tax (HVUT) electronically?

This tax affects both inter- and intra-state vehicles with gross taxable weights of 55,000 lb. or more. Vehicle owners must report and pay this tax using IRS Form 2290 (Heavy Vehicle Use Tax filing). There are exceptions for vehicles traveling less than 5000 miles per year; a 25% reduction for vehicles registered in Canada or Mexico; and some other special cases.

Enforcement is via FHWA, which will withhold Federal Aid funding for states that do not verify proof of HVUT payment. Therefore, states are mandated to require proof of payment of the tax before they may issue a truck registration or license. Reference 54 says that it is the policy of FHWA that each state require proof of HVUT payment either: before registering, or within 4 months after registering if a suspension registration system is implemented.

As related to electronic credentialing, the problem is with the current procedures that utilize paper to fulfill the state's mandate to verify proof of payment: *the IRS stamps "received" on a paper copy of Form 2290, indicating receipt of the taxes.* Currently there is no provision to query an IRS database for payment status. The high degree of privacy afforded to tax records is a barrier to the IRS releasing this information.

Some of the solutions that have been proposed include:

- Any state should be able to automatically query the IRS using a vehicle identification number (VIN) and a taxpayer identification number (TIN or EIN). IRS would then confirm (or deny) that HVUT has been paid for that vehicle by that taxpayer for the current period, avoiding the need for stamped paper copies.
- Every state could send the IRS a file of HVUT-qualified vehicles that are registered in that state, and push the compliance burden onto the IRS.
- States could collect the tax as part of the vehicle registration process, then pass it on to the IRS. (States should be reimbursed for doing so.)
- The cumbersome filing and checking of the Heavy Vehicle Use Tax could be replaced with a slight increase in the existing fuel tax structure.
- Use existing Safety and Fitness Electronic Records (SAFER) System for distributing HVUT payment status; or use a new or exiting registration clearinghouse. This minimizes the number of interfaces.

The IRS is interested in automating the HVUT process. The IRS will enable Form 2290 to be submitted electronically as part of their overall program for electronic filing, and per a recent change of policy will develop some kind of query capability such that a state could electronically verify HVUT payment at the time of vehicle registration. AAMVA and JHU/APL have been in contact with the IRS concerning the architectural approach. Unfortunately, production capability should not be expected before approximately 2002 or 2003, so CVISN states will need work-arounds until then.

So, how are CVISN states dealing with HVUT electronically in the meantime? Some states issue a temporary credential until HVUT proof is sent in, and only then issue the permanent credential. Some states issue the permanent credential immediately, but suspend it 30-60 days later unless the carrier has mailed in a confirming paper copy of Form 2290. A few states collect the HVUT on behalf of the IRS – that way they immediately know it has been paid and can proceed to issue the permanent credential; they do this as a customer service to streamline the process. Some states do nothing until and unless they have a stamped copy of Form 2290.

7.2 Interoperability Tests

Interoperability tests for credentials administration functions are being defined according to the criteria in the *CVISN Operational and Architectural Compatibility Handbook (COACH) Part 5, Interoperability Test Criteria* (Reference 6). The CVISN Interoperability Test Suite Package (References 26-28 and 65) explains the test scenarios, cases, procedures, and data. The tests are divided into two categories: those that test the interaction between pairs of products (pairwise tests) and those that verify a more complete functional thread (end-to-end tests). The list of available tests for credentials include:

- accept and process electronic IRP credential applications using EDI
- accept and process electronic IFTA credential applications using EDI
- accept electronic filing of and payment for IFTA quarterly tax returns using EDI

A similar set of tests are being developed for IRP and IFTA for Web-based applications.