Fuel Transportation in the digital age

Why PIDX is sponsoring work on standards for hauler, vehicle and driver records

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The connected fuel truck is already here…

… and it will get even better…

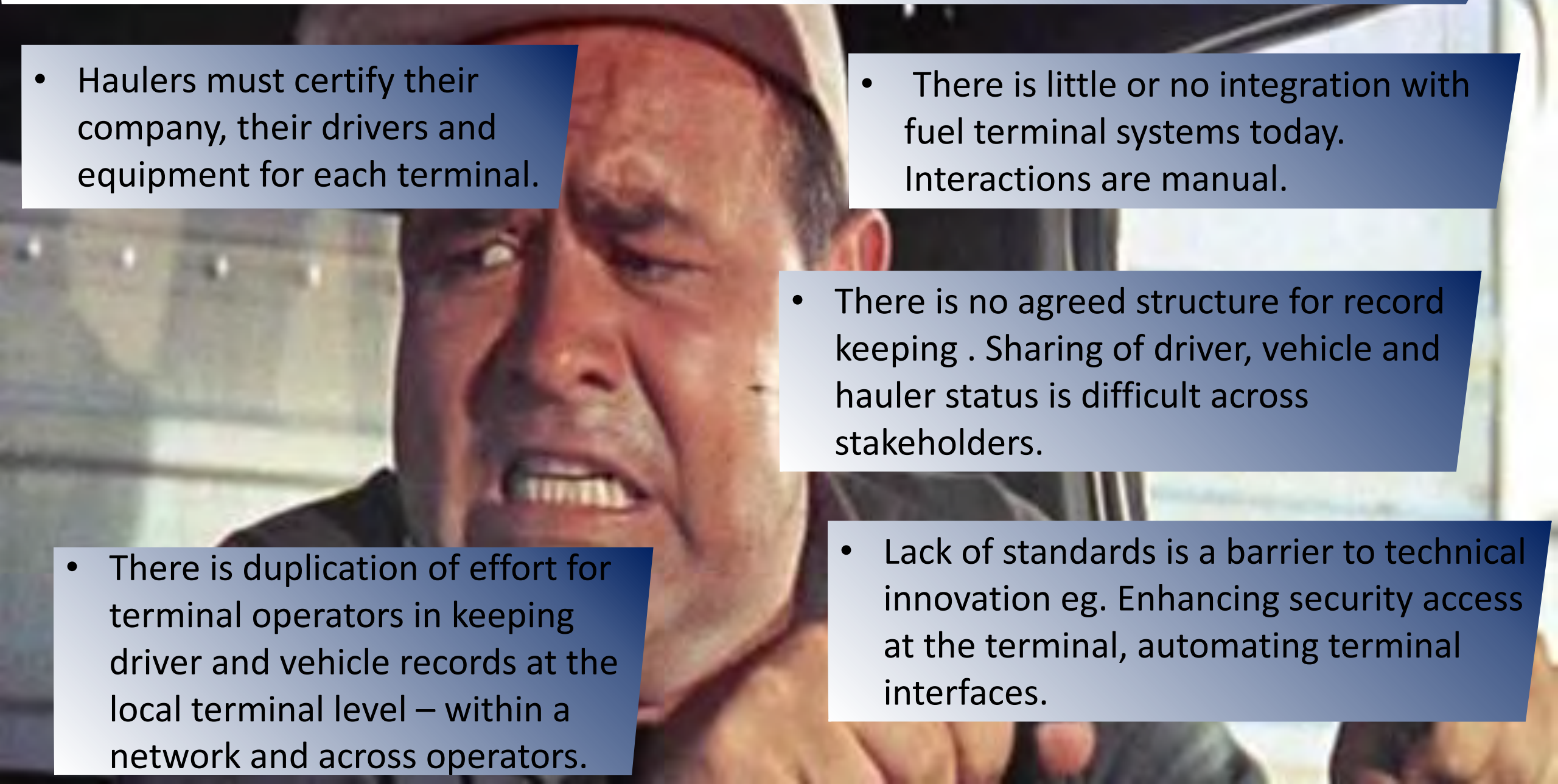
… with digital twins in the fuel transportation sector.

Fuel Tanker Data – Blackout + Enablers = Visibility

Our consumer experiences shape our business expectations.

- Goods and services are available instantly
- Information is accessible everywhere
- Account set ups are easy

Now contrast this.



- Haulers must certify their company, their drivers and equipment for each terminal.
- There is little or no integration with fuel terminal systems today. Interactions are manual.
- There is no agreed structure for record keeping . Sharing of driver, vehicle and hauler status is difficult across stakeholders.
- There is duplication of effort for terminal operators in keeping driver and vehicle records at the local terminal level – within a network and across operators.
- Lack of standards is a barrier to technical innovation eg. Enhancing security access at the terminal, automating terminal interfaces.

Standards for the exchange of hauler, driver and vehicle records

Purpose:

- Establish standards for the exchange of fuel haulers, vehicles and driver records between stakeholders, in support of technical innovation.

Specifications will include the following:

- data elements for haulers, vehicles and drivers
- data structures and relations
- Technology for the transfer of information
- Data security requirements
- Regulatory requirements to be met

Scope of work

In scope (Is)

- Hauler, vehicle and driver data
  - driver name, certification expiry, biometrics, etc
  - trailer tank inspection date, certificates and licenses, etc
  - hauler insurance records, SCAC code, etc
- Data structures and relations - s
- Technologies for accessing and f
  blockchain, API, etc
- Data security requirements
- Regulatory requirements
  - data privacy, antitrust, GDPF

Out of scope (Is not)

- Other terminal master data such as Vendor, product, maintenance, assets
- Vehicle safety standards
- Other related opportunities
  - Standards for driver training
  - Industry common training materials
  - Standards for driver and vehicle recertification
  - Tracking driver suspensions for unsafe practices

Project sponsors and participants

Use cases: Standards for Hauler, driver and vehicle records

- Standardized language that aligns system development for the automation of driver, vehicle, and terminal information exchange.
- Single entry point for hauler/tanker authorization records and common distribution means between all terminal operators.
- Data record integration/synchronization between cloud based solutions and local instances of terminal automation systems within a terminal network.
- Metrics for dynamic cargo and other cargo meta data.

Benefits

Terminal operators

- Reduces duplication and simplifies record keeping at terminal network level
- Share information more easily in exchange agreements
- Respond faster to supply outages
- Form data alliances with other operators to recognize certifications
- Gain access to automation and integration services from vendors

Distributors, haulers and drivers

- Access information that can easily be consolidated for ease of administration
- Follow common standards to attach and communicate driver and vehicle documents
- Access to subscription services
- Access to driver self management solutions

Software developers and equipment firms

- Common structure for establishing driver and vehicle information services
- Guidelines for developing network integration capabilities across terminals
- Integration with other services like dispatch solutions, gate access, etc.

Questions?