

1. PROPOSED PROJECT TEAM/STUDY NAME

Standards for the exchange of fuel hauler, vehicle and driver records

2. EXECUTIVE SUMMARY

- Currently, fuel haulers must certify their company, their vehicles and their drivers for each fuel terminal they lift from in a market, which, quite often, involves providing similar information multiple times, in different formats, to different parties.
- As there is no agreed structure for the record keeping, sharing of information between stakeholders is difficult and inefficient.
- In absence of standards for the exchange of these records, there is also much duplication of effort by fuel terminal operators to capture, store, maintain and retrieve these records at the local terminal level – within a network and across operators.
- The lack of standards is also a barrier to technical innovation, for instance leveraging biometrics for more robust terminal access control, or automating terminal and driver interfaces. Vendors currently have no guidelines for the development of technologies that would support these innovations.
- Several PIDX members have expressed interest in establishing common standards for terminal master data records in the past. As this is a vast undertaking, starting with fuel hauler, vehicle and driver records would be a substantial start.
- This project proposes to lay out standards for the capture, storage and retrieval of fuel hauler, vehicle and driver records for the purpose of exchanging records efficiently between stakeholders.

3. DESCRIPTION

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| PURPOSE | Establish standards for the exchange of fuel haulers, vehicles and driver records between stakeholders, in support of technical innovation. |
| SCOPE | <p>The following data elements and structures are within the scope of this project:</p> <ul style="list-style-type: none"> ● Hauler records such as SCAC code, FEIN, terminal accreditations, etc. ● Vehicle records such as trailer tank inspection date, terminal accreditations, license and registration ● Driver records such as name, driver license and expiration, terminal accreditation and expiry date, biometrics |

| | |
|--------------|---|
| | <ul style="list-style-type: none"> ● Data structures and relations such as vehicle and hauler relationships ● Technologies for accessing and exchanging data such as blockchain, API, etc. ● Data security requirements ● Regulatory requirements such as data privacy, antitrust and GDPR. <p>The following are out of scope of this project:</p> <ul style="list-style-type: none"> ● Other terminal master records such as vendor, product codes, maintenance, and asset records ● Hauler, vehicle and driver certification requirements ● Standards for driver training; industry common training materials ● Standards for driver and vehicle recertification ● Tracking and sharing of driver performance information ● Terminal owner specific hauler records such as hauler insurance records |
| GOALS | <p>Specifications will include the following:</p> <ul style="list-style-type: none"> ● 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 |

Identify criteria for success of the deliverables/specification as deployed in Industry.

- Representative participation from industry stakeholders (software vendors, terminal operators)
- Review and feedback from haulers and distributors.

Identify how the proposed deliverables/specification relates to existing or under development deliverables/specifications. Identify how these will relate to each other.

- There was an initial scoping of work done regarding terminal master data, however this work has not progressed.

Identify the integral sets of specifications that will be created or modified by the proposed work effort. (See 8.0 Initial Contributions)

Identify the expected useful life of the proposed deliverables / specification, e.g. estimated retirement dates or circumstances.

- We expect these standards will endure and evolve based on needs and opportunities driven by digital transformation and technical innovation.

BACKGROUND

Identify how this work is specific to the energy industry and to the primary area of focus for PIDX. Identify other sources for aspects of the required solution that are not industry specific.

- While some standards do exist in the transportation industry, such as SCAC codes for haulers, the needs of fuel transportation are quite specific to the over the road distribution of fuels. Where industry standards and regulations do exist, the intent will be to leverage these.

Identify the solutions that currently exist in the area of the proposal. Identify competing technologies/solutions.

- While terminal automation software vendors have their own specification for the storage of hauler, vehicle and driver records, we are not aware of any industry wide standards for the management of these records.

Identify other organizations that are doing similar work. Identify what they are doing and why additional work is needed. Identify how the proposed work effort will coordinate with related work efforts.

- None to our knowledge.

Identify the industry organizations / groups who want this deliverable / specification.

- PIDX Downstream Committee participants have expressed interest in these standards: Magellan, DTN, Toptech Systems, ExxonMobil, and Tauber Oil.

Identify all of the stakeholders of which you are aware.

- Stakeholders include haulers, their drivers; terminal operators; fuel distributors; software vendors.

Identify the stakeholders who are willing to join the work effort. (See Sponsor & Participants)

- Magellan, DTN, Toptech Systems, ExxonMobil, Transport4, and Tauber Oil.

PROPOSAL

- Confirm PIDX interest in commissioning a project team to establish standards for the exchange of hauler, vehicle and driver information.
- Proceed with the development and publication of these standards.

4. BENEFITS

- Establishing standards for hauler, vehicle and driver records provides benefits for terminal operators, distributors, haulers and drivers as well as software vendors. Specifically for:

Terminal operators

- Reduce duplication and simplify 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 driver and vehicle 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 vendors

- 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 authentication solutions, etc.

5. SPONSORS AND PARTICIPANTS

PIDX member/company sponsoring development of these specifications:

| Member | Company |
|--------------|------------|
| Marc Lalonde | ExxonMobil |
| Chris Stuck | Valero |
| Lisa Rotunno | DTN |

The following PIDX members/companies are participants in the development of these specifications:

| Member | Company |
|----------------|-----------------|
| Scott Weathers | Toptech Systems |
| Suzanne Downey | Tauber Oil |
| Lisa Rotunno | DTN |
| Ann Rolison | Magellan |
| Elena Mereanu | Transport4 |

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| Mail distribution list required? | No |
| Please provide the name of the mail distribution list: | N/A |

6. DELIVERABLE SCHEDULE

| Component | Status | Estimated Completion Date |
|-------------------------------|-------------|--------------------------------|
| Hauler feedback | Under way | November 30 th 2018 |
| Approval of PTP | Under way | March 31 st 2019 |
| Discovery of data elements | Not started | March 31 st 2019 |
| Regulatory requirement review | Not started | March 31 st 2019 |
| Finalize data elements | Not started | March 31 st 2019 |
| Data transfer options | Not started | June 30 th 2019 |
| ... | | |
| Publish standards | Not started | January 1 st 2020 |

7. ANTICIPATED COMPLETION DATE

December 31, 2019

8. INITIAL CONTRIBUTIONS

| Document Name | Type of Document | Document Source |
|---------------|------------------|-----------------|
| | | |
| | | |
| | | |

9. PIDX RESOURCE REQUIREMENTS

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|-----------------------|-----|
| Minute taking | N/A |
| Facilitation | N/A |
| List other activities | N/A |

At this stage we do not anticipate any resourcing needs from PIDX other than arranging for final review by the Executive Committee of this proposal. The work effort will be handled by member company representatives.

| Planned activity | Number per month | Number of months | Duration (hrs) | PIDX Time (hrs) |
|-----------------------|------------------|------------------|----------------|-----------------|
| Conference calls | 2 | 6 | 1 | 1 |
| Face to face meetings | 0 | 0 | 0 | 0 |

| | |
|--|------|
| Total PIDX staff time required for this project. | None |
|--|------|

9. **SPONSORING MEMBER/WORK GROUP/SUBCOMITTEE**

This specification has been submitted by Marc Lalonde, ExxonMobil, on behalf of the Downstream Work Group/Sub-Committee.

The chair of this Work Group/ Sub-Committee has reviewed this submission for completeness and understands this particular Work Group/ Sub-Committee is the Sponsoring Work Group/ SIG, responsible for the communication process. This does not mean the Chair or Work Group/ SIG is approving the actual work or its inclusion in any specification.

Chair Approval: Marc Battistello, Baker Hughes
Date: December 13, 2018

10. **PIDX EXECUTIVE COMMITTEE**

Upon review by the PIDX Executive Committee, this Project Team Proposal (PTP) is:

Approved

Denied

Requires additional information

If "Denied" or "Requires additional information, please provide details:

December 24, 2018
Date



STANDARDS FOR THE EXCHANGE OF HAULER,
VEHICLE, AND DRIVER RECORDS
PIDX STANDARDS PROJECT TEAM (SPT) 04B

PROJECT TEAM PROPOSAL
Approved December 24, 2018

ADDENDUM – DRAFT INVITATION TO HAULER PARTICIPANTS

Sent on behalf of PIDX

Dear _____,

As a leader in the fuel transportation industry, you'll probably agree that the current process for registering and updating vehicle and driver records at fuel terminals is inefficient and repetitive.

PIDX, a leading industry trade association active in development of petroleum industry data exchange standards, is considering standards for the capture, storage and retrieval of fuel hauler, vehicle and driver records to facilitate the exchange of records between stakeholders such as your company and fuel terminal operators. We would like to invite you to weigh in on these standards, to ensure these standards are both meaningful and relevant to businesses such as yours.

The reasons for this work are compelling:

- Currently, fuel haulers must certify their company, their vehicles and their drivers for each fuel terminal at which they lift in a market, which quite often involves providing similar information multiple times, in different formats, to different parties. As there is no agreed structure for the record keeping, sharing of this information between stakeholders is difficult and inefficient.
- In absence of standards for the exchange of these records, there is also much duplication of effort by fuel terminal operators to capture, store, maintain and retrieve these records at the local terminal level – within a network and across operators.
- The lack of standards is also a barrier to technical innovation, for instance leveraging biometrics for more robust terminal access control, or automating terminal and driver interfaces. Vendors currently have no guidelines for the development of technologies that would support these innovations.

Several PIDX members have already expressed interest in establishing these standards. Should you agree to participate in this PIDX project team, your commitment will consist of the following:

- One project team telecon every month
- One Downstream Committee telecon every month
- Reviewing material for relevance to your business in advance for feedback at these telecons
- Registering as a PIDX project team participant at the following [link](#).

Please consider joining our PIDX project team.

Tks. M.