What is PIDX?
“The Engine Behind Petroleum eBusiness”

Paris February 2014

PIDX INTERNATIONAL
The place to go for oil and gas e-business standards

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Powering eBusiness in the Oil and Gas Industry

- With a very strong industry-based Board of Directors supporting our vision for global growth and adoption
- Supported by a cross section of members from across the whole petroleum-related industry
- Providing a single forum for eBusiness optimisation
PIDX Mission

PIDX provides a global forum for delivering the process, information and technology standards that facilitates seamless, efficient electronic business within the Oil and Natural Gas industry and its trading community.

Guiding Principals

✓ Focus on business-oriented objectives
✓ Enlist the most qualified people to lead and participate in our organization
✓ Act as an inclusive Global Standards Forum
✓ Communicate broadly and often with our industry
✓ Leverage the work of others where possible
✓ Recruit and maintain a diverse membership
✓ Make standards available on an open and royalty-free basis
• PIDX (Petroleum Industry Data Exchange) was formed in 1987 with a long term remit to develop and maintain standards to enable eCommerce in all its forms for the whole Oil & Gas industry.

• Initially developed Electronic Data Interchange (EDI), and moved in the 1990s to XML standards.

• PIDX now has 14 business documents and business processes spanning the full Procure to Pay and Order to Cash interaction between trading partners.

• PIDX spans the whole industry from well to filling station. There is a continuous effort to maintain an up-to-date refined products code list.

• PIDX has a product classification, schemas and taxonomy with more than 4,000 industry product and service noun/modifier templates, and a Data Dictionary with eBusiness terms.

• PIDX are the only open eBusiness standards, created by the industry, for the industry!
PIDX’s Main Activities

- Standards and Guidelines Committees
  - Business Messages Workgroup
  - Business Processes Workgroup
  - Technology Advisory Committee
  - Global Business Practices Workgroup
  - Catalogue and Classification Workgroup
  - Downstream Workgroups
  - Regulatory Reporting Workgroup

  Working closely together

  Numerous projects at any time, such as Supplier KPI, Enhanced Price Sheet, etc

- Plus Non-Standards Activities
  - International Business Development
  - Marketing
  - Membership
Our Recent Global Meetings

Argentina  
Norway  
London  
Dubai  

Houston  
Bahrain  
New Delhi  
Mumbai  

Mexico  
China  
Bogota  
Kuala Lumpur  
Perth

More in 2014……
Benefits of using PIDX Standards

• At least 120 Oil & Gas companies around the world - most of the majors, a large number of independents, and some NOCs (representing more than 80 percent of global E&P spend annually) - have committed to the PIDX standard in their eCommerce activities. This number continues to grow every month.

• 18 Third Party Solution Providers (networks, marketplaces) which offer services to the Oil & Gas industry have committed to the PIDX standard in their eCommerce solutions for their customers.

• Many suppliers will have already adjusted their internal systems to work within the PIDX business processes and document sets, therefore any new buyer implementing eCommerce will realise faster onboarding from the suppliers to connect.
Benefits of using PIDX Standards

• The PIDX Standards are technologically agnostic and free to use, avoiding the risk of being trapped into a proprietary solution which would be more expensive to support and maintain, and restrictive to use.

• Often proprietary solutions have regular updates which demand reworking of internal business systems, under a timeframe imposed by a non-industry third party.

• Faster implementation times can increase the return on investment (ROI) in adopting B2B in the Procure to Pay activity of a company, and other business data movements between trading partners.
Where do PIDX’s documents standards fit in the Supply Chain

Middleware – Simple cost effective and a fast installation

- Business Rules
- Routing
- Messaging / Acknowledgements
- Automated, Manual, or Browser-based?
Transaction Documents in XML

Defines the CONTENT and TRANSACTION standards for SECURE E-Commerce in Oil & Gas

Transaction Standards

- SUPPLIER CATALOGUES
  - PRODUCT & SERVICES TEMPLATES
  - UNSPSC Classification

Content Standards

- SECURE TRANSMISSION PROTOCOL (AS2 or RNIF)
  - CRYPTED ENVELOPE
  - DOCUMENT XML SCHEMA

BUYER ERP
- MASTER DATA
- VENDOR DATA
- CONTRACT
- PURCHASE ORDER
- SERVICE ENTRY SHEET
- INVOICE

SUPPLIER ERP
- MASTER DATA
- CUSTOMER DATA
- CONTRACT
- SALES ORDER
- FIELD TICKET
- INVOICE

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PIDX in the Downstream

Features

• Supports real-time data transfer immediately after a transfer is completed – truck, barge, pipeline, etc.
• Supports data clearinghouse functionality – single hub for all communications for a supplier.
• Right-to-lift supports product allocation and credit management at company owned and third party facilities.
• Standardized data sets include company I.D.s, products, terminals/depots, and carriers/hauliers.
PIDX in the Downstream

**Standards Coverage**

Global standards used to exchange electronic documentation regarding custody transfer and movement of petroleum products

- Bills of lading for truck loading and barge/vessel movements
- Custody transfer tickets into or out of pipelines
- Pipeline schedules

**Usage**

- Nearly 100 percent coverage in the United States
  - Over 2 million truck loads per month are supported by PIDX electronic data
- Global standard adopted in 2013 with active implementations in Europe and Australia for major oil companies
Catalogue and Classification Workgroup

**Catalogue Standards**

- More than 4,000 Templates used to describe Materials and Services
  - Nouns
  - Modifiers
  - Characteristics
  - Sequence
  - Units of Measure
  - Classification to UNSPSC

**Petroleum Industry Data Dictionary**

- The data dictionary captures an array of industry specific terminology
  - A useful industry reference source
  - Currently more than 7000 entries
PIDX provides the templates for industrial strength data quality

Developed by the industry, for the industry, to classify and describe products & services
Noun Modifiers mapped to UNSPSC to give consistent spend reporting

Segment Family Class Commodity

MINING AND WELL DRILLING MACHINERY AND ACCESSORIES
OIL AND GAS DRILLING AND EXPLORATION EQUIPMENT
COMPLETION TOOLS AND EQUIPMENT
LINER HANGERS

Noun HANGER
Modifier LINER

Attribute 1 TYPE
Attribute 2 LINER SIZE
Attribute 3 CASING SIZE
Attribute 4 CASING WEIGHT
Attribute 5 LENGTH
Attribute 6 MAXIMUM OD
Attribute 7 MODEL DESIGNATION
Attribute 8 MATERIAL
Attribute 9 SETTING PRESSURE
Attribute 10 TOP CONNECTION
Attribute 11 BOTTOM CONNECTION
Attribute 12 SPECIAL FEATURES
Attribute 13 APPLICATION

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The values of high quality data through PIDX

High Quality Data

- Working Capital
- Cost of Capital
- Access to Capital
- Gross Margin
- Feeds
- B.I.
- SG&A Expenses
- Reporting
- Regulatory

Speed
Efficiency
Accuracy
Transparency

e.g. Spend Analytics = Happy CFO
PIDX is a real standard, in high volume action, today with a major IOC

**Evaluates to invoices totalling ~ $13 billion**
Growth of Operators globally who are committing to the use of PIDX Standards

![Bar chart showing growth of operators from 2002 to 2012]
Our members
Learning and doing

- What other companies are doing with integrated systems
- What their successes have been
- How to pilot PIDX standards with trading partners
- How to reduce maintenance and leverage interoperability
- How PIDX standards support your corporate sustainability initiatives
• PIDX brings companies together in an open forum
• It helps drive industry eCommerce direction
• Members increase visibility of their products and services
• Enjoy unlimited subcommittee, workgroup and specific interest group participation
Shape the future of eCommerce by participation in PIDX’s various Standards and Guidelines Committees
Benefits of PIDX Membership

✓ Members shape the future of eCommerce standards for PIDX by guiding their development and approval for our global industry.
Come and be a part of PIDX, and help guide our industry.

Thank you, et Merci