

# E&P industry benefits from data exchange standards

*As the industry generates more and more information in varied formats, there is an increasing need for industry-wide exchange standards.*

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As many in the oil and gas E&P industry have experienced, digital oilfield technology has allowed operators to make great strides in addressing critical business challenges. Despite this early promise, a significant barrier to full realization of the digital oilfield's potential value remains: incompatible data formats. The various technologies and systems used along the value chain are created by different vendors, service companies, and operators with different, often proprietary, data formats. In many cases, even on the same project, operators, service companies, and technology providers are using different formats to transfer data and information.

The need to reformat data as it moves along the value chain or between stakeholders is often inefficient, error-prone, and costly.

An easy way to think about the problems that can arise from trying to communicate in multiple data formats is in terms of spoken language. If two people speak different languages, they might ultimately communicate, but will likely require a translator, the process will be slow, and if something small but vital gets lost in translation, it could mistakenly alter the context or desired outcome of the conversation. Conversely, two people speaking the same language are operating with the same standard and have a much better chance at successful communication.

## Facilitating communication

A global, industry-wide set of freely available and vendor-neutral data exchange standards for key information along the entire E&P value chain has the potential to help solve data incompatibility problems; facilitate more efficient and seamless integration of this information; and improve implementation and operation of technology. This in turn will enable E&P companies to more effectively and economically solve their business challenges. Standards with real business value can only be achieved through industry-wide collaboration and with facilitation by a neutral body.

Common data exchange standards have no competitive advantage for any one business or organization, but can offer tremendous value to everyone in the industry (operators and service companies alike) along the entire E&P value chain. By using a common set of data exchange standards, resources can be focused where value is best created — by addressing business and operational issues — instead of wasting valuable time and incurring costs to reformat and interpret data again and again.

Most businesses in the industry recognize the benefits of standards. Few people argue against the value of standards and in fact, most freely admit that having and using standards makes good sense. However, the process of initially identifying, developing, and implementing the appropriate standards is often time consuming and complex.

The E&P industry is still at the early stages of common standards development. The only way to successfully achieve the goal of open industry standards that benefit all participants is

through a coordinated, collaborative, and industry-wide effort that incorporates input from as many stakeholders and perspectives as possible.

Ideally, such an effort should be led by a neutral organization that understands the challenges involved and can facilitate the process to develop, adopt, deploy, and maintain critical standards.

Energistics is a not-for-profit membership consortium founded in 1990 to serve in this role of neutral coordination and facilitation of E&P data exchange standards development. Through its special interest groups and work groups, Energistics is currently working to create relevant data exchange standards to enable E&P businesses to implement the best technologies to solve their business challenges.

As with any new technology, benefits of standards-based technologies are often limited to the early adopters. Only when adoption and implementation become broad and deep do the benefits start to increase exponentially. Telecommunications companies decided early on that broad standardization allowed their technology to accelerate rapidly and enable worldwide communications.

When the E&P industry truly embraces and employs common standards-based technologies, the results have the potential to be just as revolutionary and the benefits just as transformational. **E&P**

