Regulatory Data Standards Committee

Meeting summary for June 22, 2016

Agenda Items

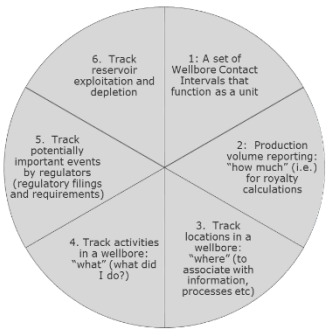
The first committee meeting focussed on defining what successful outcomes would look like, who key stakeholders are, to clarify the role of other stakeholder groups (such as vendors and consultants), and to start defining opportunities and priorities.

Framework of standards

Standards provide a common ground for collective agreement. Regulators understand that good communications and effective data centric relationships with industry can be facilitated when regulators set expectations that are aligned with industry standards. Industry data standards are intended to make data and information "fit for purpose" by all key stakeholders. These standards should be developed collectively between regulators and operators, and should exist at every stage of the Exploration and Production life cycle.

While every regulator has slightly different processes, there is a considerable amount of "common ground" upon which standards can be built. Other industries are leading the way with standards deployment that enable working in the global economy (such as airports and telecommunications). Efforts to develop harmonized regulatory systems are underway in many parts of the world now, and the emergence of government-mandated open data initiatives will further fuel the need for industry data standards. Discussion around the importance of making these standards consumable, understandable and usable followed.

Vocabularies and Semantics are our highest priority. Several barriers to clear and efficient data centric relationships between regulators and operators were discussed. Semantics and vocabularies were identified as the most important issue to resolve, because these are the building blocks for communication and the development of future standards. Unfortunately, it is common for various stakeholders to use completely different words to refer to the same concept, or to use identical words to reference different concepts. Consistent vocabularies and methods to disambiguate between these diverse lexicons, similar to the existing "What is a Well?", will help ensure that we are able to share concepts effectively.



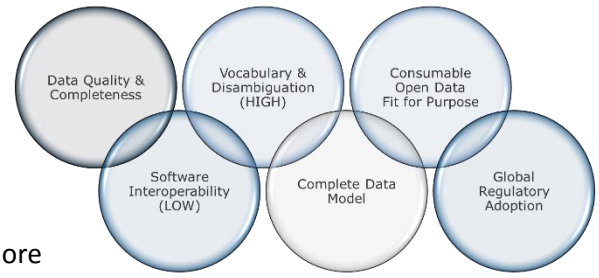
A list of topics (such as completion, status, well type, spud date etc.) that may benefit from disambiguation was discussed, and will be further developed. A workgroup to disambiguate the word "Completion" has already been charted and approved; this work group is expected to launch soon.

Data quality and completeness emerged as important priorities. Several regulatory agencies described the challenges faced when incomplete or unreliable data is received. Similarly, operators have identified this as a challenge when obtaining data from regulators. This consequence of non-standard and undocumented expectations was further explored during the regulatory stakeholder interviews conducted in 2015 (the findings of this survey are on the PPDM Website).

The current PPDM Data Rules project contains over 3,000 data rules. As this work evolves, it will contain measureable and objectives criteria against which data objects can be tested to ensure they are "fit for

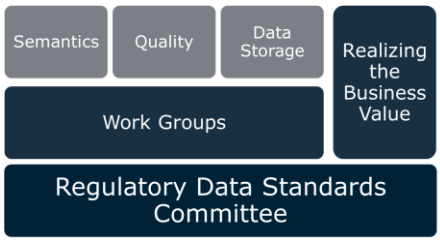
purpose". The group sees this as a mechanism to ensure that data quality and completeness challenges can be addressed, and as a method to set stronger and more consistent expectations about what makes data "good" at every stage of the life cycle. **Data storage is important to most.** Gaps in the current PPDM data model will be addressed through workgroup processes. Some gaps include field inspections, environmental analysis, soil disturbance, water management, reclamation, and other key regulatory processes.

Standards adoption is critical to success. The path to effective adoption includes creating understandable and useful standards (so you can find them), determining how and when to adopt standards into an information architecture (this is usually a strategic decision), and seeing standards adopted into software products and services. It was noted that unlike operators, regulators do not have ready access to off the shelf software solutions. A standards framework would make this more feasible, both for regulators and software vendors.



Supporting adoption will require participation from vendors and consultants both at the planning and adoption level. PPDM proposed a plan for participation by other industry players; the plan was well received and will be pursued going forward.

Regulatory Participation. A Great Opportunity is now open for Regulators to participate in the formation, understanding, and transformation of Global Energy Regulatory Data Standards! This common discussion and approach to addressing current and emerging regulatory requirements for data, analytics, and consistency is the foundation for the future. Those who are interested should contact PPDM (Kristell@ppdm.org).



For more information about this project, visit the website here.

Who are the players?

Regulators

- Co-chair: Arthur Boykiw (VP of Information Services) – Canada: Alberta Energy Regulator
- Co-chair: John Broderick (Business Transformation Project Manager) – US: Bureau of Land Management
- Alex Ross (Senior Information Strategist) – Australia (SA): Energy Resources Division, Department of State Development
- Mark Ducksbury (Manager, Data Management Team) – Australia: National Petroleum Titles Administrator (NOPTA), Dept of Industry, Innovation and Science
- Mark Snow (Supervisor, Permits and Bonding Unit) – US: Michigan Department of Environmental Quality, Office of Oil, Gas and Minerals
- Thomas Schmidt (Manager, Well Data) – Canada: Saskatchewan Ministry of the Economy

Industry Operators and Data Vendors

- Floy Baird (Supervisor, Better Data Faster Team, Geosciences Services) – Devon
- Sean Udell (VP Operations and Technology) – geoLOGIC systems
- Peter MacDougall (Canadian Well Data, Government Relations) - IHS

PPDM Association

- Trudy Curtis (CEO) – PPDM Association
- Ingrid Kristel (Senior Project Manager) – PPDM Association
- Elise Sommer (Senior Community Coordinator) – PPDM Association