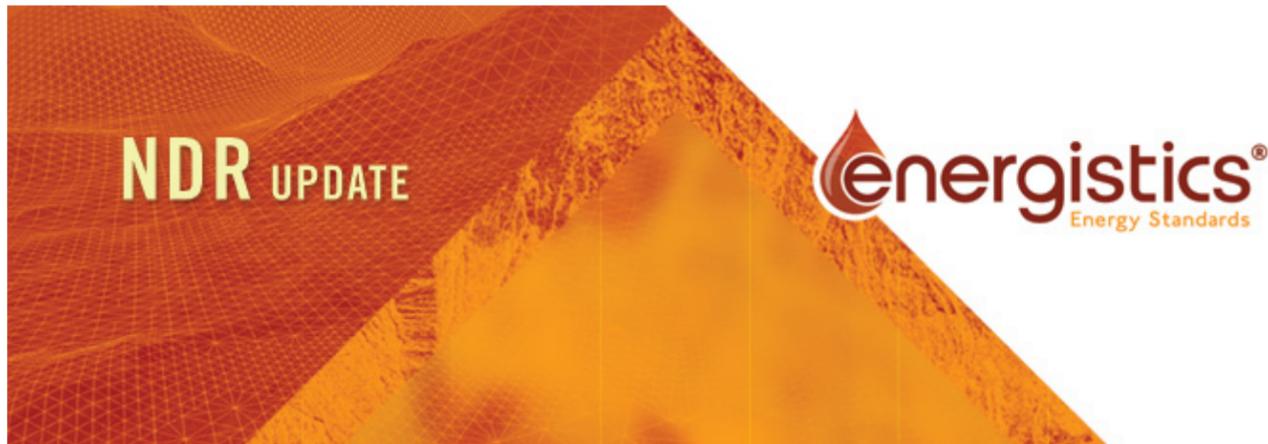


# National Data Repository (NDR) Newsletter February 2016

NEWS



## Contacts

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You will already be aware that because of the major problems in the oil industry in 2016 the NDR conference in San Antonio had to be postponed. This was very disappointing after all the planning that we had done but the meeting has only been postponed and planning for the next one has already started.

I was particularly disappointed in the postponement as this was to be my last NDR meeting and I had hoped to say goodbye to the many friends I had made at these meetings. So please take this, my last Newsletter, as my goodbye. Although I am giving up the NDR work, please feel free to contact me at the email below with questions you have asked before; I still know what I knew before and the people I knew before.

In this newsletter, I want to highlight two pieces of standards work that I believe are potentially of real benefit to the Regulators that we were hoping to take forward at the NDR meeting. These are Well Header data and a "Body of Knowledge for NDRs". I also want to make a final plea for you to collaborate more and use Energistics to do that.

**Stewart Robinson**  
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## Events

WITSML Fundamentals  
February 23-24, 2016  
Houston, TX USA

WITSML SIG Meeting  
April 4-8, 2016  
Houston, TX USA

RESQML ILAB  
May 9-13, 2016  
Spring, TX USA

PNEC  
May 17-19, 2016  
Houston, TX USA

EAGE  
May 30 – June 2, 2016  
Vienna, Austria

## NDR Meetings – Energistics Membership and Regulatory SIG

I started these meetings a long time ago in 1996 when 13 countries came to London. The initial intention was to find out what other people were doing so that, hopefully, we could help each other. I wanted the meetings to be informal and more like working meetings than traditional data management conferences where people regurgitate talks they have given before. I hope we achieved that.

After a few years, I also hoped that the meetings would lead to Regulators collaborating around standards and I saw Energistics as the focus for that. There is a little way to go on this but I really hoped that San Antonio would be another step.

The UK government was, I believe, the first government body to join Energistics (POSC as it was then) in 1991 and I remember negotiating the membership fee. Although Energistics is funded by major oil companies and major software suppliers, the Energistics Board recognized that Regulators are potentially real beneficiaries from

standards. That is why they have supported the NDR efforts. The NDR meetings would not go ahead without Energistics but few of the attendees are members. The Board wants to feel some commitment from Regulators, effectively by more of them becoming members.

### Connect to Energistics



A number of other Regulators have joined but not enough and they have not been active enough. Many of the benefits of membership are intangible but there is real opportunity cost and I believe that the NDR meetings have demonstrated this. We have not only gathered Regulators together who had never met before but we exposed them to the suppliers who were able to develop their products.

### Energistics Regulatory

#### Agency Members

The next major step would be to formalize an Energistics Special Interest Group (SIG) for Regulators. This would be a neutral forum for sharing best practices, developing standards, running meetings, etc.

Please consider joining and contact Nicholette Ross [nicholette.ross@energistics.org](mailto:nicholette.ross@energistics.org), telephone +1 (281) 243-2143, even if just for a chat.



### Well Header Data

Regulators of oil provinces all share the same overall goals of exploiting their oil province and maximizing the revenue. There are many facets of their business that are a shared burden and from which they derive little competitive advantage. One of the major burdens is data management. Data management of oil data is a global and growing problem involving:

- the legislation that defines the data
- the business processes that collect, store and release the data
- the (often) poor quality of the data.

The business processes and data quality issues are shared across the oil industry. For some years Energistics has been working with oil companies and service companies to address these issues. The solution that has emerged is the drilling data standard WITSML™.

WITSML is now an established and accepted data exchange standard. It is employed in the software of all the major drilling companies who are storing extensive sets of well data in WITSML format for the most recent wells. WITSML could be the basis for Regulators to work together (and importantly with oil companies and service companies) to develop a Regulatory digital data exchange standard for well data throughout the life of a well.

The Well Header work was stimulated following feedback from the NDR2014 conference and the results from the recent NDR survey conducted by Energistics. Metadata and in particular Well Header data was the top area for investigation.

The initial targets for this work were:

1. to define a high level set of well data collected at well completion time
2. to select a few of the data sets, drill down and identify specific data items
3. to build a digital exchange file based on the data sets in #2.

To kick this off, a survey was sent to a number of oil regulators who had showed interest and a reasonable number replied. The survey identified a number of generic areas for data sets such as completion details, geological data, deviation data, etc. that Regulators typically require when well completion details are submitted. It is not sensible to try and define a complete digital data set for all well data until such time as genuine value can be determined for the work and sufficient commitment exists to deploy any solution.

However, a very useful first step could involve defining a digital data set for the metadata – the Well Header elements. If this develops sufficient interest and demonstrates value then continuing along with the other data sets would be a logical extension.

The following items in the Well Header have been identified as being used in various business processes:

- Well name / well identifier
- Concession number / licensing identifier
- Current owner
- Original owner
- Surface location
- Datum
- Target
- Spud details
- Water depth
- Total depth
- Bottom hole location
- Original well status
- Wellbore status
- Wellbore sequence number
- Operational history
- Abandonment details.

At NDR2016, we were hoping to gather a small but active group to work on the Well Header data definitions and then using them to take the work forward. I am now proposing to do that work by getting Regulators to send me their definitions. From these I will produce initial data definitions for comment and then, with the WITSML community, produce a suggested digital exchange file.

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### Body of Knowledge

In the Energistics survey there were requests for standards in a number of areas such as:

- Naming standards such as metadata
- Well Header data
- Data exchange – mostly because the above two have always been a major problem but never resolved.

There were also a number of suggestions about having freely available software solutions in a number of areas such as:

- Data tracking / workflow software
- System for automating data submission
- Data quality tools
- Software to check completeness and accuracy of data formats
- Data management software for reservoir data
- Software to review legacy data prior to loading
- Software for manipulating legacy data

In the UK, faced with the major problem of decommissioning, the industry established the “Late life planning portal for decommissioning”. This establishes and maintains a simple index of processes, software and contacts that can be shared. It also identifies areas that are lacking and efforts are made to get people together to collaborate to develop necessary tools.

We thought that a similar index for Regulators, initially focused around NDR work, could be a major benefit. It was hoped to develop an index in breakouts which would:

- Initially consider and add to a common initial matrix produced in advance, filling in any gaps with known solutions. This could be called the “Body of Knowledge for NDRs”
- Identify any potential areas for software solutions
- Discuss how this work could be taken forward, i.e. who builds it and where is it maintained
- Is this the job of Energistics? If so, there is the need for an active Regulatory SIG – but this would need active support from Regulators in terms of subject matter expertise, as well as financial support for Energistics to lead this.

This has the potential to be a significant tool for Regulators and NDRs and I hope it goes forward.

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