### Product Description

Discovery Wells®

Version 3.4

WITSML Object Specifications Version V1.2

WITSML API Specification Version V1.2

Discovery Wells enables any number of users to view real-time data from any well site providing WITSML data. It accepts any type of signal, time and/or depth based, real-time or historical, and displays any mixture of signals in a highly configurable graphical user interface. It can integrate data from any number of sources such as MWD, LWD, mud, cement, weather, position data, mud logging, casing and other sources in real-time, always with the comfort of secure data transfer to your location.

With Discovery Wells one viewer can be used throughout the company to access data in the operation center, in the office, at home, or any other place. Custom templates are easily designed with a minimum of skills (drag and drop) and can be distributed to anyone. Discovery Wells increases access to real time data, improves overview on well site status, improves collaboration, distributes information, reduces cost, reduces need for training, overcomes contractual and geographical hurdles. Discovery Wells is the all in one viewer for real time drilling and well data.

The system build on the WITSML 1.2 standard and can connect to any compatible WITSML data source, including the Intellifield SiteCom System.

### Kongsberg Intellifield

Kongsberg Intellifield is an independent supplier of products, systems and solutions for real time remote operations to operators / contractors in the oil and gas industry. We are a leading provider of operations centers, "always on" collaboration, offshore / onshore integration, real time data management, visualization and analysis software and real time intelligence.

For more information about how WITSML is being deployed within the SiteCom software applications, please contact Kongsberg Intellifield via their website at [http://www.km.kongsberg.com/intellifield](http://www.km.kongsberg.com/intellifield).

WITSML Activities: Steering/Technical committee involvement with specific focus on log, realtime, trajectory, mudlog and other relevant objects.

Contact Persons: Rune Skarbo (steering committee), Jan Stubstad (technical committee), Jan Kåre Igland

### Availability

From November 2004

### Submitter Information

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WITSML Function Coverage

Check all that apply. Explain limitations and/or special circumstances in the Comments area.

Notes:

Functional coverage is organized according to five kinds of product functionality with respect to the WITSML Standards: two kinds of client functions and three kinds of server functions.

- A product may exhibit multiple kinds of functionality.
- The terms client and server are used here exclusively with respect to the WITSML Server API interfaces. Clients issue requests to servers. Servers receive and respond to requests from clients.
- Behaviors for products that do not use the WITSML Server API are classified in an analogous manner.

The five product classifications of WITSML functional coverage are:

- **Client Products** --
  1. **WITSML Producer Client** -- a product that generates or otherwise obtains data that is formulated as WITSML object instances and sent to a WITSML Server to be incorporated in that server's data population. Examples of such products include products that pick up real-time data from sensor devices, format it, and send it to a server; and products that extract data from data stores, format it, and send it to a server.
  2. **WITSML Consumer Client** -- a product that issues requests for data as queries of subscriptions to a WITSML Server and then receives data as query responses or subscription publications. Examples of such products include products that acquire data from a server, possibly reformat it, and deliver it to an application program or viewer utility.

- **Server Products** --
  3. **WITSML Receiving Server** -- a product that performs WITSML Server functions in general and, in particular, acquires data from external sources. Data acquisition may be through WITSML API interfaces or other mechanisms.
  4. **WITSML Delivering Server** -- a product that performs WITSML Server functions in general and, in particular, delivers data to external destinations. Data delivery may be through WITSML API interfaces or other mechanisms.
  5. **WITSML Managing Server** -- a product that performs WITSML Server functions in general and, in particular, supports requests from authorized client applications to augment (extend), modify, or delete (part or all) WITSML object instances.

- **General Functions** --
  6. Virtually all products associated with the WITSML Standards will issue and/or process **WITSML Server General Functions** to determine the capabilities and version of a server product.

<table>
<thead>
<tr>
<th>1. <strong>WITSML Producer Client</strong></th>
<th>A product that (generates and) sends WITSML object instances to a destination process:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a [ ] Sends to a WITSML Server using AddToStore interface</td>
<td></td>
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<tr>
<td>1b [ ] Otherwise</td>
<td></td>
</tr>
</tbody>
</table>
2. **WITSML Consumer Client**  
A product that requests and receives WITSML data from a source process:  
- 2a [X] Queries a WITSML Server using GetFromStore interface  
- 2b [___] Subscribes to a WITSML Server using Publish interface  
- 2c [___] Otherwise  

3. **WITSML Receiving Server**  
A product that performs the WITSML Server interfaces and receives data from source processes:  
- 3a [___] Receives WITSML object instances via AddToStore interface  
- 3b [___] Otherwise receives WITSML object instances  
- 3c [___] Receives non-WITSML form data treated as if it were WITSML object instances or a virtual equivalent  

4. **WITSML Delivering Server**  
A product that performs the WITSML Server interfaces and delivers data to destination processes:  
- 4a [___] Delivers WITSML data in response to queries via GetFromStore interface  
- 4b [___] Publishes WITSML data in response to subscriptions via the Publish interface  
- 4c [___] Otherwise delivers WITSML data  
- 4d [___] Delivers non-WITSML form data derived from WITSML object instances or a virtual equivalent  

5. **WITSML Managing Server**  
A product that performs the WITSML Server interfaces and manages (augments, changes, deletes portions, or deletes entirely) WITSML object instances or a virtual equivalent:  
- 5a [___] Processes modification requests via AddToStore, UpdateInStore, DeleteFromStore interfaces  
- 5b [___] Otherwise processes modification requests  

6. **WITSML General Functions**  
A product that issues general WITSML Server interface requests to a WITSML Server:  
- 6a [___] Issues GetVersion and/or GetCapabilities  
- 6b [X] Processes GetVersion and/or GetCapabilities  

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**WITSML Object Coverage**  
Mark D for **Deliver** and R for **Receive**, as applicable. If all functions do not apply, note either functions supported or functions not-supported, e.g. supported by 1a. Explain other limitations or special cases in the Comments area.  

- [R] Realtime  
- [R] Well  
- [R] Wellbore  
- [R] Log & WellLog  
- [R] Trajectory & Traj. Stn.  
- [R] Message  
- [R] Mud Log  
- [R] Rig  
- [R] Survey Program  
- [R] Target  
- [R] Fluids Report  
- [R] Operations Report  
- [R] Risk
<table>
<thead>
<tr>
<th>Description</th>
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<tbody>
<tr>
<td>Formation Marker</td>
<td>[ ]</td>
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<tr>
<td>Conventional Core</td>
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<td>Sidewall Core</td>
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<td>Cement Job</td>
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<td>Tubular</td>
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<td>BHA Run</td>
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<td>WBGeometry</td>
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<tr>
<td>Other, specify:</td>
<td>__________________________</td>
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**Comments:** None.

**Last Update**
July 7, 2007 by Jan Kårè Igland