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<input checked="" type="checkbox"/> Sediment_Secondary	
<input checked="" type="checkbox"/> Seabed_Feature_Polygon	
<input checked="" type="checkbox"/> Environmental Samples	
<input checked="" type="checkbox"/> Geotechnical_Sample_Point	
<input checked="" type="checkbox"/> TSdp_Sample_Point	

OGP Seabed Survey Data Model - SSDM

Egil Ingebretsen

Specialist Survey and Seabed Intervention

24.10.2013

Standardization also a topic in 1999 and



Havbunnskartlegging og inspeksjon

2-4 februar 1999, Dr. Holms Hotel, Geilo

UNDERVANNSFARKOSTER

Standardisering av dataformat?

Synspunkter og forslag

Foreleser:
Audun Brandsæg
SCS

- 2006 – Shell GIS TAP SSDM Workgroup. Released first version
- 2009 – Reviewed by Shell Upstream Europe & Woodside.
- 2009 – Released Updated Version
 - Shell Upstream Asia Pacific has over 40 surveys (site, sweep, pipeline route, pipeline surveillance) delivered since 2007
- 2009 – OGP Surveying & Positioning Committee paper
- 2010 – OGP Seabed Survey Data Model Task Force Formed
- 2010 – Petronas & PCSB engagement
- 2011 – OGP Geomatics Committee launches Seabed Survey Data Model V1
- 2012 – Guidelines for the use of the Seabed Survey Data Model
- 2013 – Guideline for the delivery of the Seabed Survey Data Model

www.ogp.org.uk

Geomatics Committee



Surveying, positioning and spatial data management activities affect virtually all stages of the exploration & production lifecycle.

Managing these activities in a timely and accurate manner is essential. Spatial data integrity is vital to ensure, for example:

- The safety of operational activities and the protection of the environment
- The validity of business decisions that dictate the areas for exploration & production activities
- Licence agreements, relinquishments, unitisations and activities adjacent to international boundaries

Comprised of leading specialists in the areas of surveying, geodesy, cartography and spatial data management, OGP's Geomatics Committee aims to help members by:

- Developing and disseminating best practice
- Providing a forum for exchanging experiences and knowledge
- Influencing regulators and standards organisations
- Maintaining international positioning exchange formats and a geodetic parameter database (EPSG)
- Liaison with industry associations

Current major activities and resources of the Geomatics Committee include:

- The [EPSG Geodetic Parameter Dataset](#), which is the de-facto standard for geodetic parameters worldwide
- Published guidance notes and data models
- Revision and replacement of the former UKOOA and SEG positioning data exchange formats – now transferred to OGP ownership

Subcommittees & Task Forces

3D Seismic BinGrid Task Force ([Sigrid Elke Renate Matthes](#))

Drilling Hazard Site Survey Task Force ([Dag Lundqvist](#))

Geodesy Subcommittee ([Geir Simensen](#))

Geo-Information Subcommittee (?)

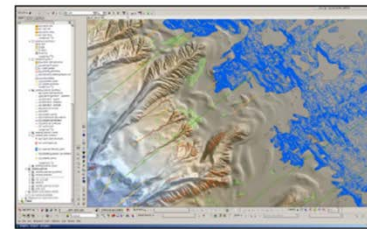
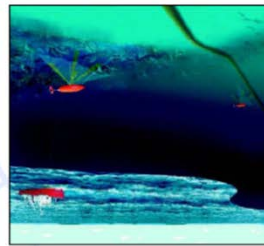
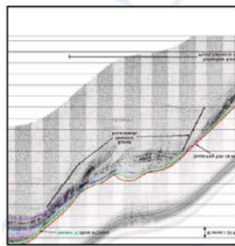
P1/P2 Task Force ([Leif Fenstad](#))

Seabed Survey Data Model Task Force ([Egil Ingebretsen](#))


What is SSDM?

- A GIS template for Seabed Survey industry
- Based on an ESRI Geodatabase format as ESRI ArcGIS is the de-facto industry standard for spatial data management, mapping and GIS
- Provide core components typically used in the Oil & Gas companies offshore seabed surveys
- OGP SSDM effort is pioneered by Shell and Woodside
- Many surveys has been successfully delivered in SSDM

Vision is for the industry to have a template/standard for how seabed survey data is delivered to and managed by oil and gas companies



SSDM based on an ESRI Geodatabase format, to tied to ESRI ?

 **esri** Understanding our world.

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Home Industries Products Training Support Services Events News About

ArcGIS

Geodatabase

Overview

Multiuser Geodatabase

Multiuser Functionality

Single-User Geodatabase

Data Storage

Data Models

Storage in an RDBMS

White Papers/Articles/ Podcasts

Interoperability

Resource Center

What's New

[File Geodatabase API 1.3](#)

This release of the API provides support for Microsoft Visual Studio 2012 and several critical bug fixes.

Interoperability

Esri File Geodatabase API


The File Geodatabase API allows you to develop apps that interact with a file geodatabase without using ArcObjects. The API is available as a C++ library (.dll), which provides access to low-level file I/O modules.

With the API you can

- Create new file geodatabases.
- Read a file geodatabase's schema.
- Create new schemas for simple feature objects.
- Read and write data.
- Perform attribute and (limited) spatial queries.

The File Geodatabase API supports 32-bit and 64-bit Windows and Linux platforms.

[Download the API](#)



[Download Now](#)

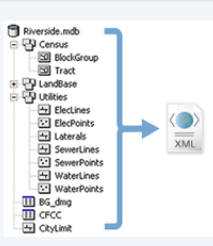
The File Geodatabase API supports 32-bit and 64-bit Windows and Linux platforms.

Geodatabase XML

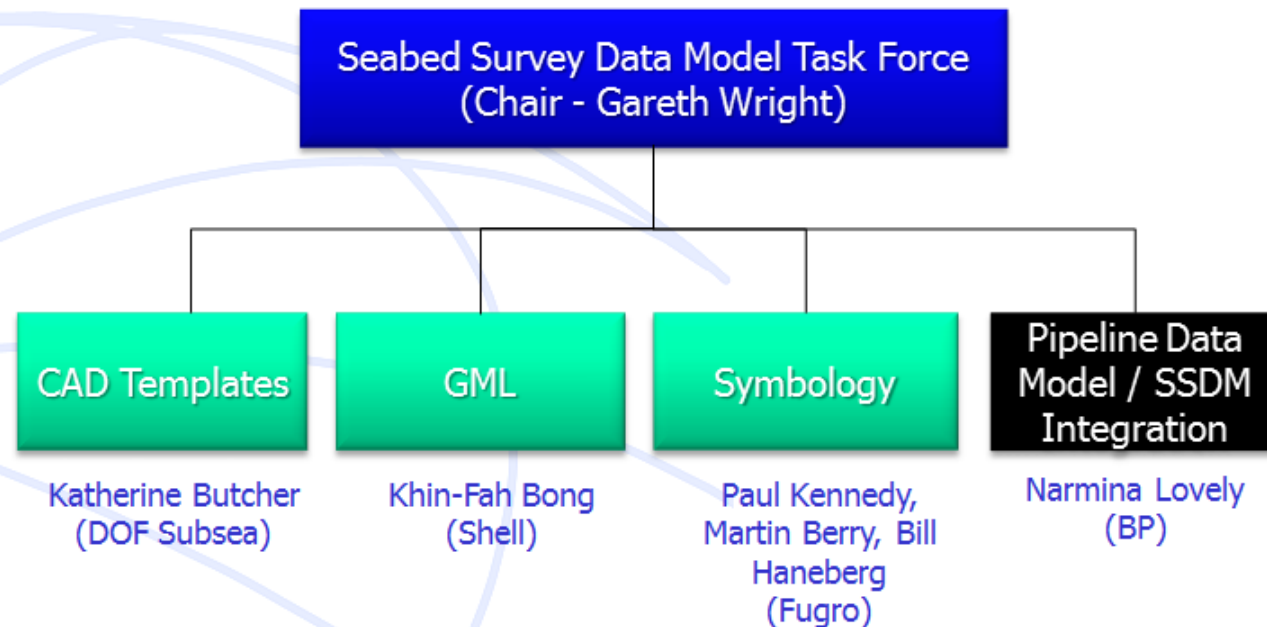
- Export and import geodatabase schemas.
- Tabular data is interpreted as XML by ArcGIS Business Logic.
- Geodatabase XML represents Esri's open mechanism for information exchange between geodatabases and other external systems.

The geodatabase defines a generic model for geographic information and is implemented as either a collection of files in a file system or a collection of tables in a DBMS. The benefit of this generic model is that the geodatabase and its contents are multipurpose, shareable, and standards based.

Esri openly publishes and maintains the complete geodatabase schema and content as an XML specification and provides sample implementations to illustrate how users can share data updates



XML Menu Sample



Task Force

Workgroup

Geographic data models

- CAD data model

- Stores geographical data as points, lines and areas.
- Attributes primarily kept as layer names and annotation

- Coverage data model

- Introduced in 1981 allows spatial data to be combined with attribute data
- Spatial data stored in indexed binary files and attributes in tables

- Geodatabase model

- The geodatabase storage model is based on database management system (DBMS)
- The DBMS provides a simple, formal data model for storing and working with information in tables.
- Object oriented data model making features smarter and allow any sort of relationship among features

Types of geodatabases

The geodatabase is a "container" used to hold a collection of datasets. There are three types:

- Personal geodatabases

- All datasets are stored within a Microsoft Access data file, which is limited in size to 2 GB.

- **File geodatabases**

- Stored as folders in a file system. Each dataset is held as a file that can scale up to 1 TB in size. The file geodatabase is recommended over personal geodatabases.

- ArcSDE geodatabases

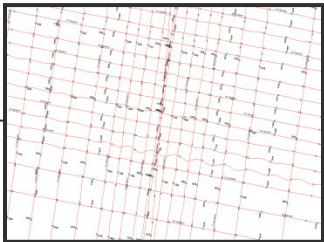
- Stored in a relational database using Oracle, Microsoft SQL Server, IBM DB2, IBM Informix, or PostgreSQL. These multiuser geodatabases require the use of ArcSDE and can be unlimited in size and numbers of users.

- The SSDM datamodel can be used in all three geodatabase types

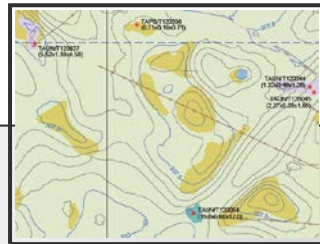
SSDM – Data Model Template

4 Feature Datasets (FD)

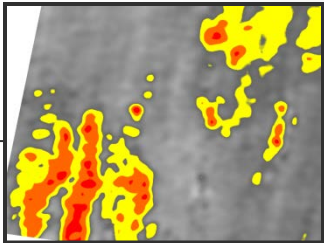
Survey Measurements



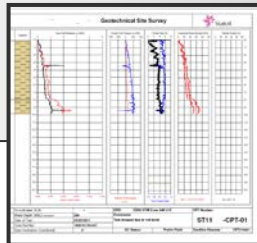
Seabed Features



Geology



Environmental Sample

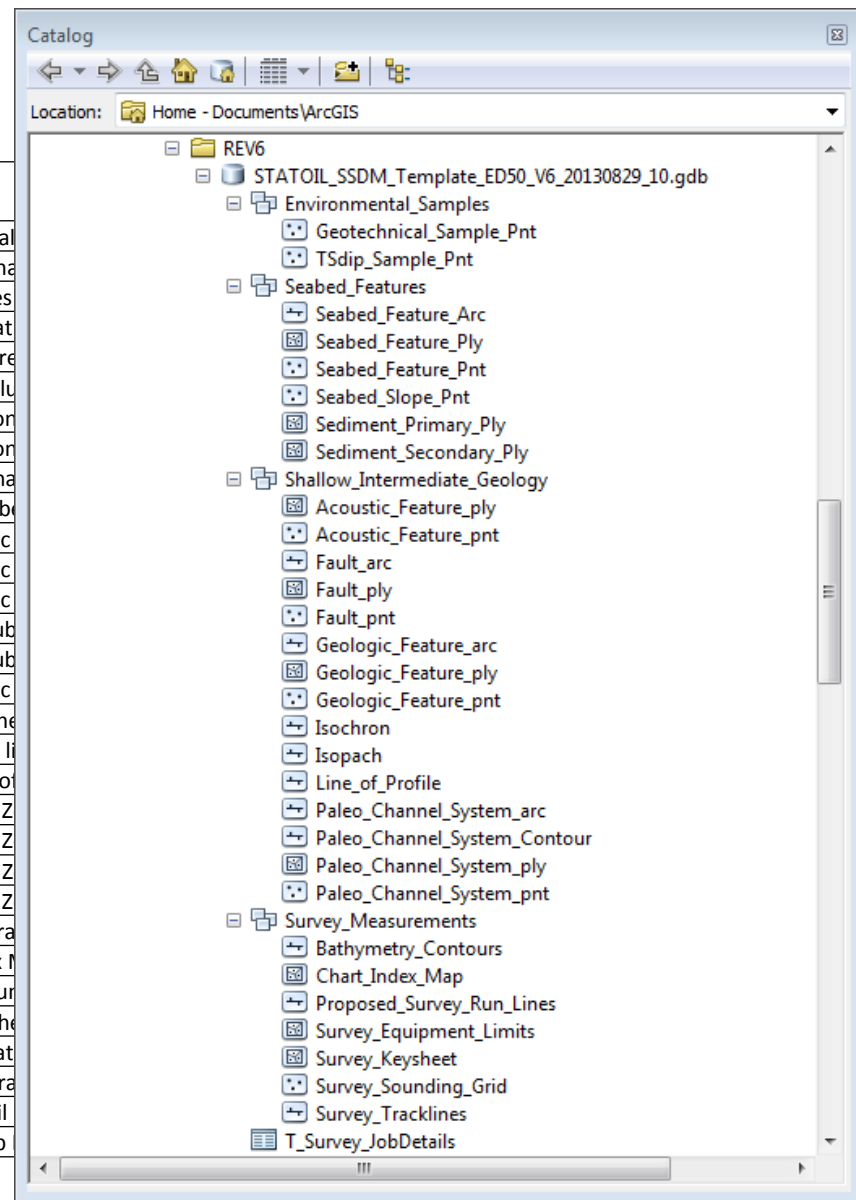


30 Feature Classes (FC)

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<input checked="" type="checkbox"/>	Geologic Feature label spot
<input checked="" type="checkbox"/>	Acoustic Feature label spot
<input checked="" type="checkbox"/>	Geologic Fault label spot
<input checked="" type="checkbox"/>	SGZ Paleo Channel
<input checked="" type="checkbox"/>	Subsurface Geologic Line Features
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<input checked="" type="checkbox"/>	Seabed_Feature_Line
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<input checked="" type="checkbox"/>	Geotechnical_Sample_Point
<input checked="" type="checkbox"/>	TSdip_Sample_Point

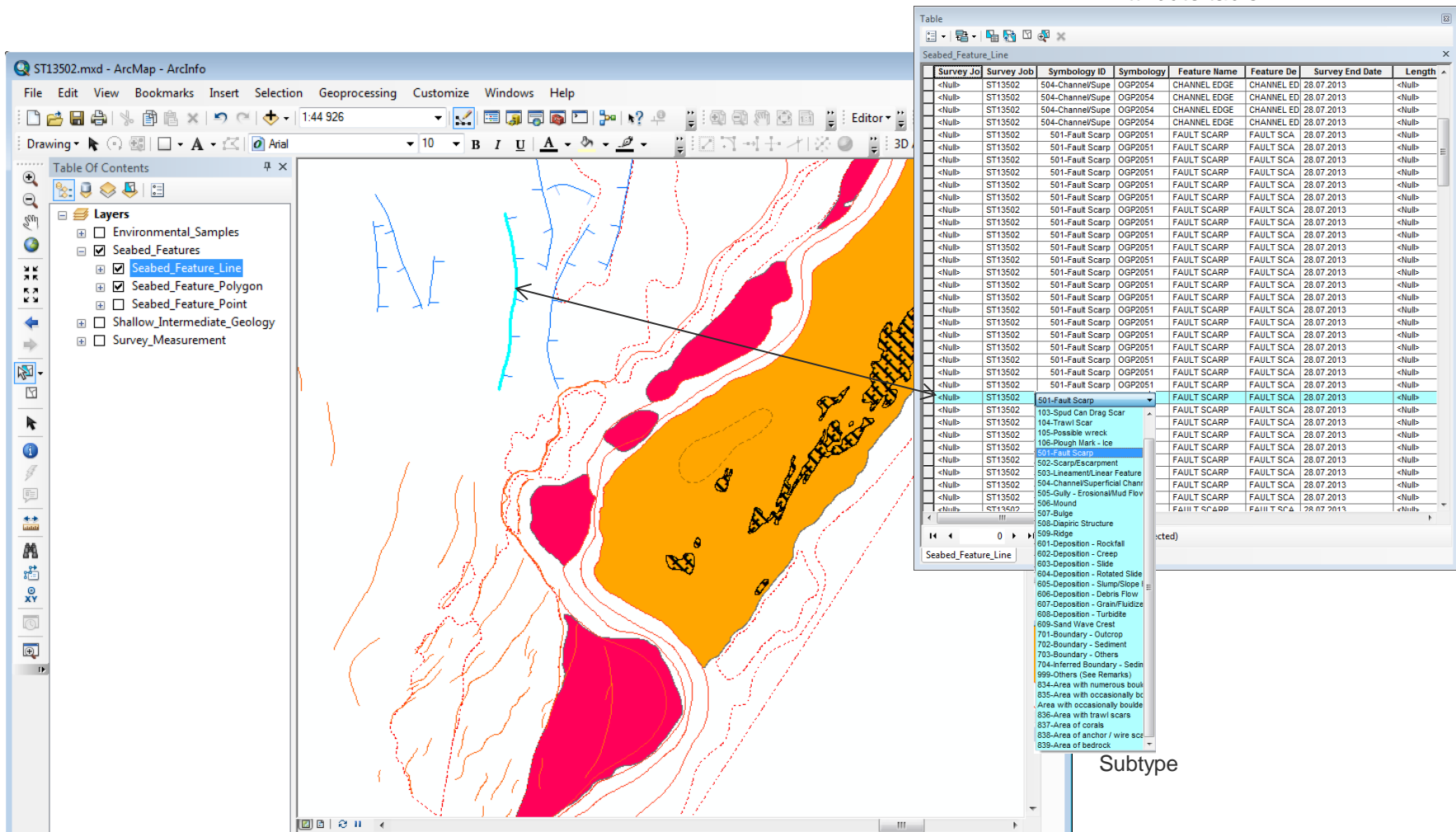
Features in SSDM

FEATURE DATASET	FEATURE CLASS	FEATURE TYPE	PURPOSE
Environmental_Samples	Geotechnical_Sample_Pnt	Point	Storing Geotechnical
Environmental_Samples	TSdip_Sample_Pnt	Point	Storing Seawater cha
Seabed_Features	Seabed_Feature_Arc	Polyline	Seabed line features
Seabed_Features	Seabed_Feature_Ply	Polygon	Seabed polygon feat
Seabed_Features	Seabed_Feature_Pnt	Point	Seabed point feature
Seabed_Features	Seabed_Slope_Pnt	Point	Seabed gradient valu
Seabed_Features	Sediment_Primary_Ply	Polygon	Seabed Classification
Seabed_Features	Sediment_Secondary_Ply	Polygon	Seabed Classification
Shallow_Intermediate_Geology	Acoustic_Feature_ply	Polygon	Seismic Acoustic Ana
Shallow_Intermediate_Geology	Acoustic_Feature_pnt	Point	Acoustic Feature lab
Shallow_Intermediate_Geology	Fault_arc	Polyline	Subsurface Geologic
Shallow_Intermediate_Geology	Fault_ply	Polygon	Subsurface Geologic
Shallow_Intermediate_Geology	Fault_pnt	Point	Subsurface Geologic
Shallow_Intermediate_Geology	Geologic_Feature_arc	Polyline	General purpose Sub
Shallow_Intermediate_Geology	Geologic_Feature_ply	Polygon	General purpose Sub
Shallow_Intermediate_Geology	Geologic_Feature_pnt	Point	Subsurface Geologic
Shallow_Intermediate_Geology	Isochron	Polyline	Isochron contour line
Shallow_Intermediate_Geology	Isopach	Polyline	Subsurface isopach li
Shallow_Intermediate_Geology	Line_of_Profile	Polyline	Line to indicates Pro
Shallow_Intermediate_Geology	Paleo_Channel_System_arc	Polyline	Shallow Geological Z
Shallow_Intermediate_Geology	Paleo_Channel_System_Contour	Polyline	Shallow Geological Z
Shallow_Intermediate_Geology	Paleo_Channel_System_ply	Polygon	Shallow Geological Z
Shallow_Intermediate_Geology	Paleo_Channel_System_pnt	Point	Shallow Geological Z
Survey_Measurements	Bathymetry_Contours	Polyline	Contours line genera
Survey_Measurements	Chart_Index_Map	Polygon	Chart Boxes / Index M
Survey_Measurements	Proposed_Survey_Run_Lines	Polyline	Proposed Survey Run
Survey_Measurements	Survey_Equipment_Limits	Polygon	Polygon indicates the
Survey_Measurements	Survey_Keysheet	Polygon	Project Key Informat
Survey_Measurements	Survey_Sounding_Grid	Point	Gridded X,Y,Z genera
Survey_Measurements	Survey_Tracklines	Polyline	Track Plot (4D) / sail
Table	T_SurveyJob_Details	Table	Survey Project / Job



Geographical data and attributes

Attribute table



Subtype

Project Key Information and Area of Interest Polygon – Survey Keysheet

FEATURE DATASET: Survey_Measurements

FEATURE CLASS: Survey_Keysheet

ATTRIBUTE	ATTRIBUTE ALIAS	TYPE	FIELD LENGTH	DOMAIN	STATOIL COMMENT
OBJECTID	OBJECTID	OID	4		
SHAPE	SHAPE	Geometry	0		
FEATURE_ID	Feature GUID	SmallInteger	38		
SURVEY_ID	Survey Job No	Integer	4		
SURVEY_ID_REF	Survey Job Ref	String	38		
SURVEY_NAME	Survey Title	String	255		Changed field length to 255
SURVEY_AREA_NAME	Area Name	String	50		
COUNTRY_NAME	Country Name	String	50	COUNTRY_NAME	
SYMBOLGY_ID	Type of Survey	SmallInteger	2		
SYMBOLGY_CODE	Symbolgy Code	String	20		
WORK_CATEGORY	Work Category	String	5	WORK_CATEGORY	
WORK_DESCRIPTION	Work Description	String	255		
DIMENSION	Survey Dimension	String	12	DIMENSION	
VERTICAL_DATUM_DESC	Vertical Datum Ref	String	50	VERTICAL_DATUM_LIST	Changed field length to 100
LOCAL_TIME_GMT_OFFSET	GMT Offset to Local Time	SmallInteger	2		
REPORT_REF_NO	Report Ref No	String	50		
REPORT_URL	Report Hyperlink	String	255		
DATA_URL	Data Hyperlink	String	255		
CLIENT_NAME	Client Name (Company)	String	50	CLIENTS	
QUALITY_STANDARD	Data Quality Check	String	12	QUALITY	
SURVEY_START_DATE	Survey Start Date	Date	8		
SURVEY_END_DATE	Survey End Date	Date	8		

QUALITY	esriFieldTypeString	SITE - STAGE OF DATA QUALITY ASSURANCE	UNRELIABLE
QUALITY	esriFieldTypeString	SITE - STAGE OF DATA QUALITY ASSURANCE	DATA QC'ed
QUALITY	esriFieldTypeString	SITE - STAGE OF DATA QUALITY ASSURANCE	DATA NOT QC'ed

DATA_SOURCE	Data Source (Company)	String	200	DATA_SOURCE	
DATA_SUBMISSION_DATE	Date of Data Submission	Date	8		
LAYER	CAD Layer Name	String	255		
LAST_UPDATE	Updated Date	Date	8		
LAST_UPDATE_BY	Updated By	String	50		
REMARKS	Remarks	String	255		
SHAPE_Length	SHAPE_Length	Double	8		
SHAPE_Area	SHAPE_Area	Double	8		

Feature Classes

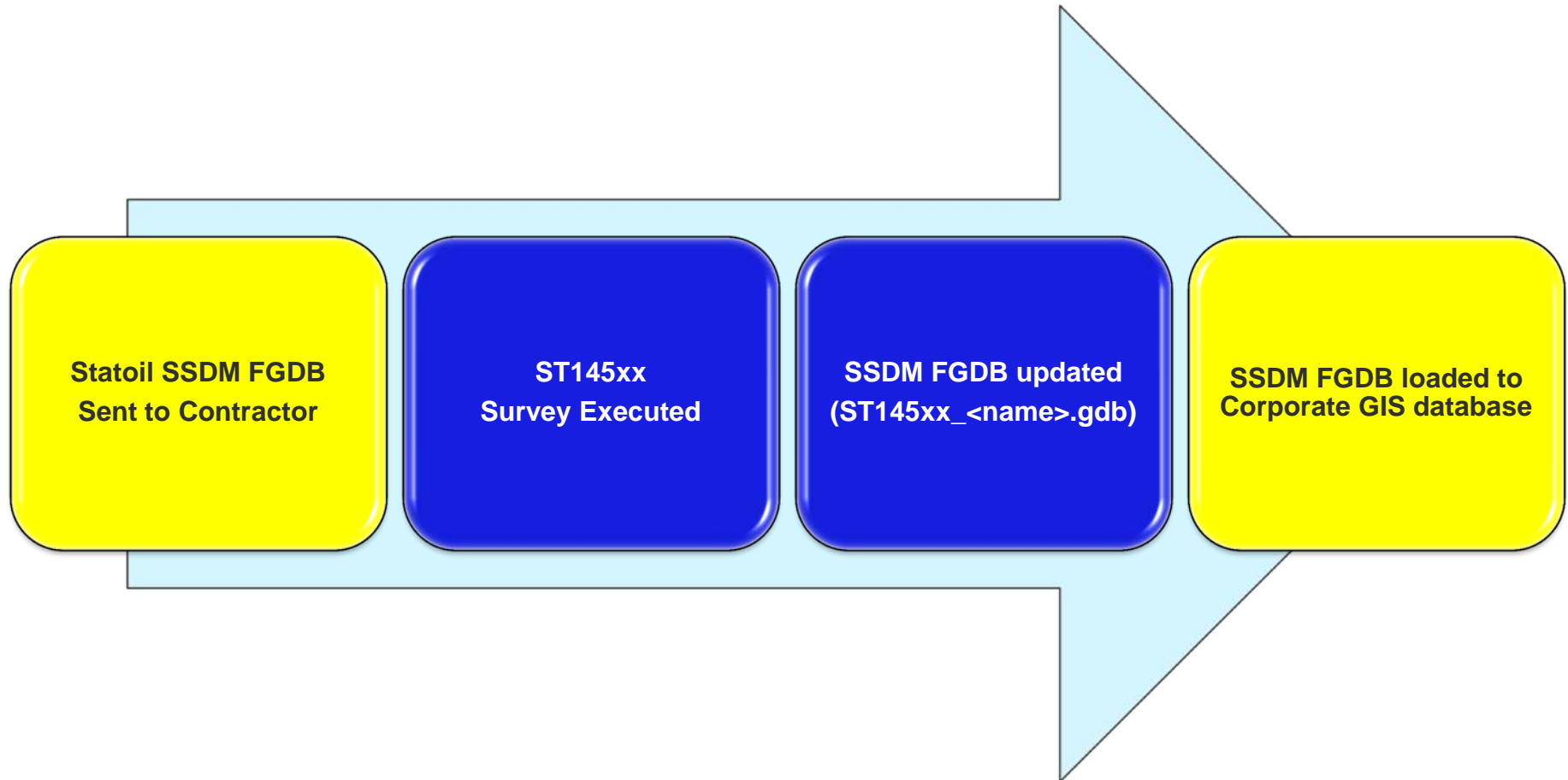
FEATURE DATASET: Seabed_Features
FEATURE CLASS: Seabed_Feature_Ply

ATTRIBUTE	ATTRIBUTE ALIAS	TYPE	FIELD LENGTH	DOMAIN	STATOIL COMMENT
OBJECTID	OBJECTID	OID	4		
FEATURE_ID	Feature GUID	SmallInteger	38		
SURVEY_ID	Survey Job No	Integer	4		
SURVEY_ID_REF	Survey Job Ref	String	38		
SYMBOLGY_ID	Symbolgy ID	SmallInteger	2		
SYMBOLGY_CODE	Symbolgy Code	String	20		
FEATURE_NAME	Feature Name	String	50		
FEATURE_DESC	Feature Description	String	255		Changed field length to 255
SURVEY_DATE	Survey End Date	Date	8		
DEPTH_IN_METRES	Water Depth (Metres)	Double	8		
IMPRESSION_DEPTH	Impression/Depression Depth (Metres)	Double	8		
HEIGHT_IN_METRES	Height (Metres)	Double	8		
DIMENSION_DESCRIPTION	Dimension Description	String	20		
HEIGHT_DESCRIPTION	Height Description	String	20		Changed field length to 50
DATA_SOURCE	Source of Interpretation	String	255		Changed field length to 255
LAYER	CAD Layer Name	String	255		
LAST_UPDATE	Updated Date	Date	8		
LAST_UPDATE_BY	Updated By	String	50		
REMARKS	Remarks	String	255		
SHAPE	SHAPE	Geometry	0		
SHAPE_Length	SHAPE_Length	Double	8		
SHAPE_Area	SHAPE_Area	Double	8		

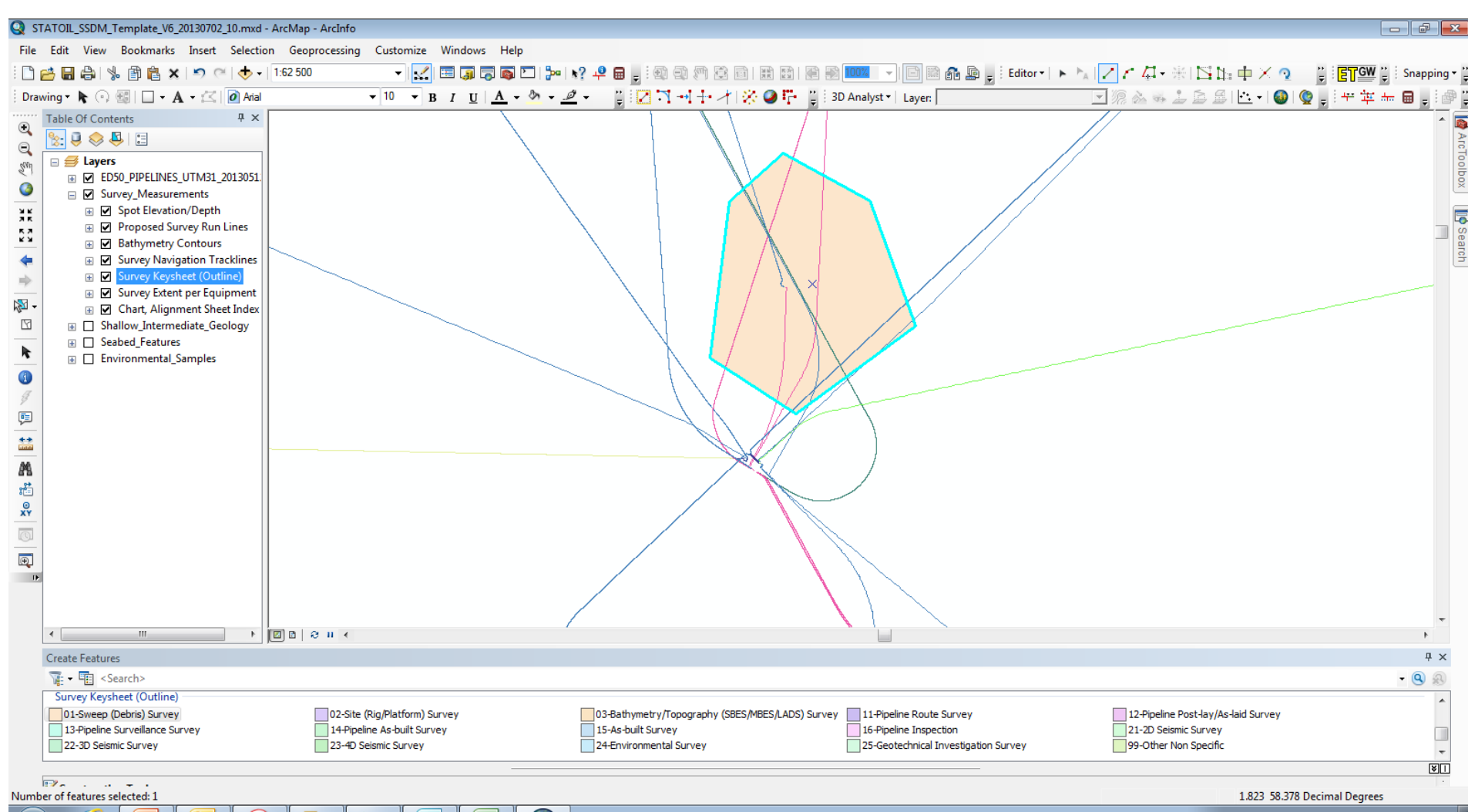
SSDM implementation in Statoil

- The full SSDM model is now populated in Statoil corporate GIS database
 - No attribute fields are removed, only some added
 - No subtypes removed, only some added
 - Database schema is documented in:
(“STATOIL_SSDM_Template_V6_20130829_10_forOGP.xlsx”)
- Two geodatabase templates are available (file geodatabase):
 - STATOIL_SSDM_Template_WGS84_V6_20130829_10.gdb
 - STATOIL_SSDM_Template_ED50_V6_20130829_10.gdb

Data flow



Example of use – Step 1 Company define survey area



Example of use – Step 2 Survey info added

STATOIL_SSDM_Template_V6_20130702_10.mxd - ArcMap - ArcInfo

File Edit View Bookmarks Insert Selection Geoprocessing Customize Windows Help

1:62 500

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 - Seabed_Features
 - Environmental_Samples

Attributes

Survey Keysheet (Outline)

Fox Seabed Mapping

OBJECTID	1
Survey Job No	14501
Survey Job Ref	ST14501
Survey Title	Fox Seabed Mapping
Area Name	Area North of The Fox
Country Name	NORWAY
Type of Survey	01-Sweep (Debris) Survey
Symbology Code	OGP3301
Work Category	ENG - Engineering Survey
Work Description	<Null>
Survey Dimension	<Null>
Vertical Datum Ref	MSL-Mean Sea Level
GMT Offset to Local Time	<Null>
Report Ref No	ST14501
Report Hyperlink	<Null>
Data Hyperlink	<Null>
Client Name (Company)	STATOIL
Data Quality Check	DATA NOT QC'ed
Survey Start Date	00:00:00
Survey End Date	00:00:00
Current Job Status	101-Job Proposed / Requested
Geophysical Contractor	<Null>
Positioning Contractor	<Null>
Positioning Processing B	<Null>
Primary Positioning Syste	<Null>
Data Source (Company)	COMPANY OWN FIELD ACQUIRED DATA
Date of Data Submission	<Null>

Choose Symbol Class

Value /	Class	Des
01-Swee...	01-Sweep (Debris) Survey	
02-Site (...)	02-Site (Rig/Platform) Survey	
03-Bathy...	03-Bathymetry/Topography (SBE...	
11-Pipelin...	11-Pipeline Route Survey	
12-Pipelin...	12-Pipeline Post-lay/As-laid Survey	
13-Pipelin...	13-Pipeline Surveillance Survey	
14-Pipelin...	14-Pipeline As-built Survey	
15-As-bui...	15-As-built Survey	
16-Pipelin...	16-Pipeline Inspection	

OK Cancel

Create Features

Survey Keysheet (Outline)

- 01-Sweep (Debris) Survey
- 02-Site (Rig/Platform) Survey
- 03-Bathymetry/Topography (SBES/MBES)
- 13-Pipeline Surveillance Survey
- 14-Pipeline As-built Survey
- 15-As-built Survey
- 22-3D Seismic Survey
- 23-4D Seismic Survey
- 24-Environmental Survey

2.188 58.368 Decimal Degrees

Example of use – Step 3 Survey Performed, contractor update data

STATOIL_SSDM_Template_V6_20130702_10.mxd - ArcMap - ArcInfo

File Edit View Bookmarks Insert Selection Geoprocessing Customize Windows Help

1:62 500

Editor Snapping

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- Seabed_Features
- Environmental_Samples

Create Features

Search

Survey Keysheet (Outline)

- 01-Sweep (Debris) Survey
- 02-Site (Rig/Platform) Survey
- 03-Bathymetry/Topography (SBES/MBES)
- 13-Pipeline Surveillance Survey
- 14-Pipeline As-built Survey
- 15-As-built Survey
- 22-3D Seismic Survey
- 23-4D Seismic Survey
- 24-Environmental Survey

Attributes

Survey Keysheet (Outline)

Fox Seabed Mapping

OBJECTID	1
Survey Job No	14501
Survey Job Ref	ST14501
Survey Title	Fox Seabed Mapping
Area Name	Area North of The Fox
Country Name	NORWAY
Type of Survey	01-Sweep (Debris) Survey
Symbology Code	OGP3301
Work Category	ENG - Engineering Survey
Work Description	We did the best we could
Survey Dimension	2D SURVEY
Vertical Datum Ref	MSL-Mean Sea Level
GMT Offset to Local Time	1
Report Ref No	ST14501
Report Hyperlink	<Null>
Data Hyperlink	<Null>
Client Name (Company)	STATOIL
Data Quality Check	DATA QC'ed
Survey Start Date	20.10.2013
Survey End Date	21.10.2013
Current Job Status	105-Data Processing/Charting/Reporting completed.
Geophysical Contractor	SUBSEA7-SUBSEA 7
Positioning Contractor	FUGRO SURVEY NORGE
Positioning Processing By	DEO- DEEPOCEAN
Primary Positioning System	SVLEDIS
Data Source (Company)	COMPANY OWN FIELD ACQUIRED DATA
Date of Data Submission	23.10.2013

OBJECTID

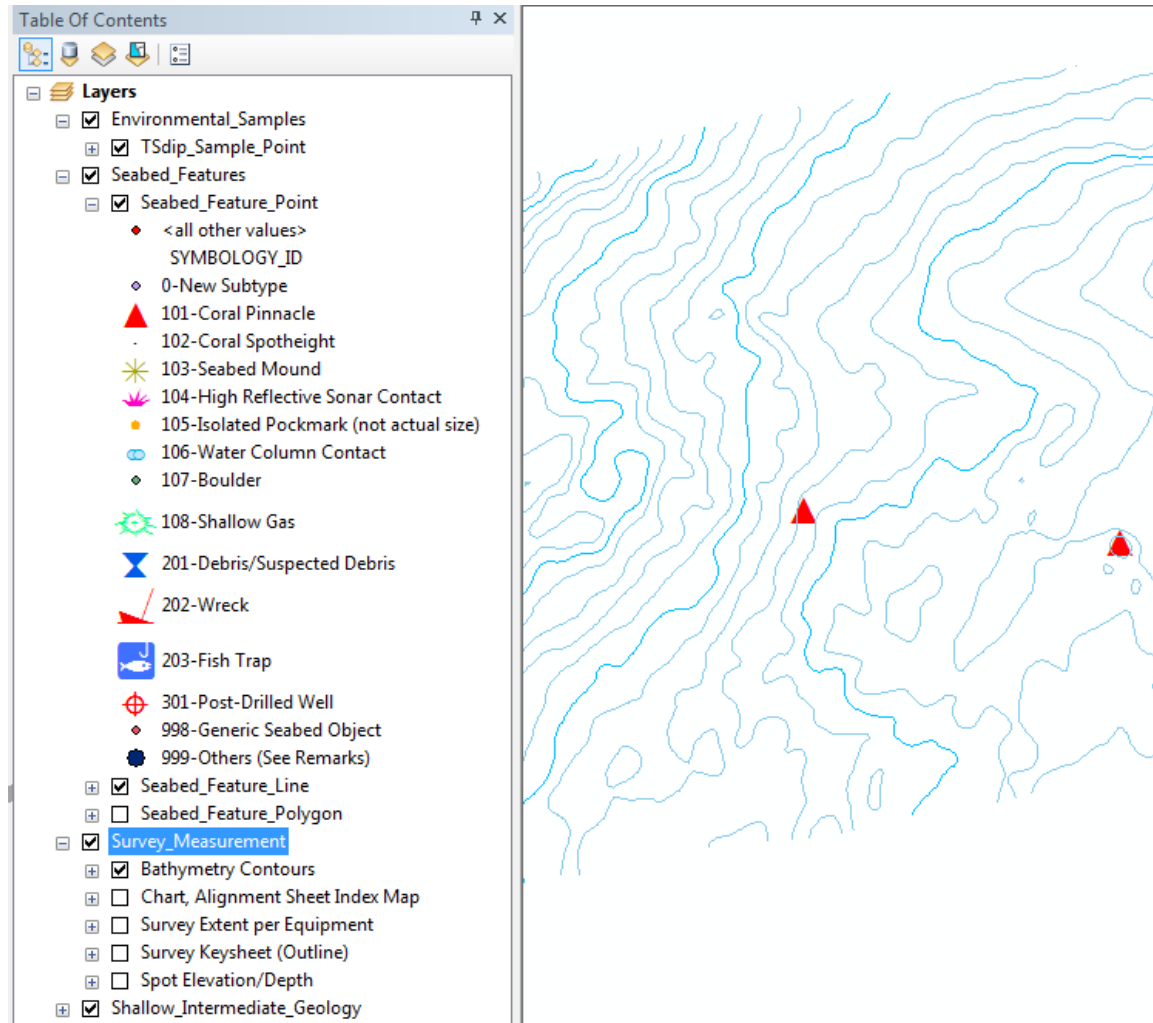
Object ID

Null values not allowed

1.836 58.358 Decimal Degrees

SSDM include predefined feature definitions

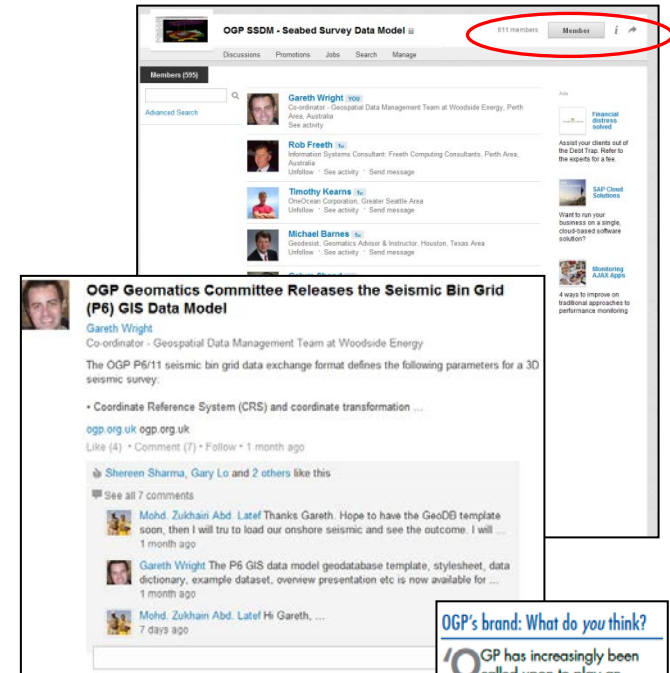
SUBTYPE NAME	SUBTYPE CODE
101-Coral Pinnacle	101
102-Coral Spotheight	102
103-Mound	103
104-Sonar Contact - High Backscatter	104
105-Pockmark - Isolated (not actual size)	105
106-Sonar Contact - Water Column	106
107-Boulder	107
108-Shallow Gas	108
201-Debris/Suspected Debris	201
202-Wreck	202
203-Fish Trap	203
301-Well - Post-Drilled	301
801-Other Debris	801
802-Anchor	802
803-Anchor Chain	803
804-Cable / wire	804
805-Soft rope	805
806-Fishing net	806
807-Scaffolding	807
808-Pipe	808
809-Drum	809
810-Metal	810
811-Concrete	811
812-Plastic / metal Container	812
813-Trawl board	813
814-Tarpaulin	814
815-Wooden debris	815
820-Mine with sinker	820
821-Mine only	821
822-Mine Sinker only	822
825-Unidentified	825
826-Possible boulder	826
827-Possible mine	827
998-Generic Seabed Object	998
999-Others (See Remarks)	999



SSDM TF – Communication with Industry

OGP

- SSDM LinkedIn group again proving to be a great way of communicating updates and generating discussion
- 611 members across industry including survey contractors, software vendors etc.
- Site used to communicate P6 GIS DM release and has led to some good questions and discussion about the new data model
- Recent discussion in **OGP Highlights newsletter on OGP's brand**. The SSDM TF has proven social media is great at engaging the industry and should be used more often!



OGP's brand: What do you think?

OGP has increasingly been called upon to play an advocacy role for the oil & gas industry,' says OGP Executive Director Michael Engell-Jensen. To effectively promote safe, responsible and sustainable operations on a global basis, OGP needs to be seen as modern and credible. This has led to the need to assess and refresh the Association's brand identity. To ensure maximum involvement in this effort, which involves working with a leading international brand consultancy, we are asking *Highlights* readers about their views of the OGP brand. In order to ensure that the insights reflect the Association's global remit, we hope to hear from all stakeholders – including those based outside the US and Europe.'

Symbology workgroup

- In March, a symbology work group was formed with the purpose to look at improving the SSDM symbology by way of:
 1. Developing symbols for the SSDM stylesheet where existing symbols don't exist
 2. Look to improve the symbology where possible using existing industry standards e.g. IHO
- Paul Kennedy, Martin Berry and Bill Haneberg of Fugro are leading this piece of work → great to see survey contractors becoming heavily involved!
- This tasks will help in the development of the SSDM CAD templates and associated symbology which is still an objective of SSDM V2

Rev	Description	Prepared	Checked	Approved	Date
1.3	Reviewed all points from XML file to ensure we captured everything	P.Kennedy			
1.2	Merged existing symbols from 2011/05/20 symbol listing.pdf	P.Kennedy			
1.1	Update format	P.Kennedy			
1.0	Initial version	P.Kennedy			

SSDM SymbolTaskForce.docx Page 1

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SSDM SymbolTaskForce.docx Page 1

SeabedML workgroup

- Safe Software have committed to supporting the SSDM GML data exchange format in FME 2014

- CARIS are continuing to be involved and are still keen to utilise SeabedML in their software products

- The industry invitation to test the SeabedML has been extended to the end of the 2013 in order to ensure we get all of the testing and feedback possible from the vendors (CARIS, CODA, QPS, Snowflake, Safe and Energistics)

- Snowflake Software has informed the SSDM TF that they have completed a test run

1. Define the SeabedML schema in Oracle Spatial
2. Successfully loaded sample data in Shapefile into the Oracle Spatial via GO Loader.

- Aim is to coordinate the SeabedML release with SSDM V2 if possible

Phase 1	Development	
Stages	GML Workspace	Status
1	Copy over from SSDM ArcGIS workspace	
	Abstract Classes	Done
	Feature Classes	Done
2	Set up CodeList from Coded Domain.	Done
3	Set up Enumeration for Feature Subtype (Manually entered. Not able to copy over from ArcGIS UML Enumeration list (subtype) included as part of the xsd)	Done.
4	Design for Survey_Trackline_Arc (polylineZM)	Use Survey_Tracklines + Survey_Shot_Points (deviated from ArcGIS Workspace)
5	Alignment of Abstract Classes to OGP Base Model	Yes
6	Finalise Attribute Field Size Specification (Char Length)	Propose to leave it open in V1
	Finalise CL dictionary documents.	All CL Dictionary files generated by EA10.1004
Phase 2	Testing	
1	Testing – with commercial/opensource software - Schema validation - Data transfer/conversion	On-going. Snowflake - successfully loaded .xsd and created target tables Esri format sample data 31/3/2013.
2	Embed schema in commercial Spatial ETL software	On-going. Technical info submitted to assigned developer in Safe Inc. Esri format sample data 31/3/2013. SeabedML format target release in FME 2014.
3	Feedback review and finalise SeabedML v1	Target Oct 2013
Phase 3	Release	
		Propose release around Dec 2013 when FME2014 is firmed.

2013 Highlights and Achievements



- Release of the *“Interface between pipeline data models and the OGP SSDM”* document
- *“Interface between pipeline data models and the OGP SSDM”* presented at the PODS User Conference on October 2 by Narmina Lovely
- SSDM TF continues to be productive with two documents in total being released in 2013 (including the SSDM delivery guideline released earlier in 2013)



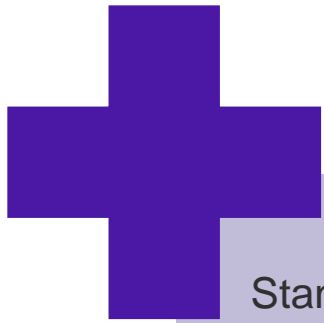
SSDM V2 Schedule

- The schedule below was proposed in April, 2013

Task	2013								2014			
	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Symbology									Approvals: SSDM TF GI SC Geomatics Committee			Publication
CAD Templates												
Update SSDM geodatabase												
SeabedML												
Examples SSDM Dataset												

- Due to the lack of sweat equity since April most of these tasks have **slipped by at least 3 months**
- It is important to emphasise that the SSDM TF has still been very productive in 2013 in releasing two documents. Unfortunately, V2 work has suffered from a timing perspective
- The SSDM TF shall carefully consider all industry feedback on SSDM V1 over the past 2 years **which will take time**. This feedback will ensure SSDM V2 is meeting all expectations and will enable it to be a stable and long standing version
- Aim will still be to release an SSDM V2 in 2014, however, it will likely be at **the back end of the year**

Implementation of SSDM



Standardization (world wide)
Reduce data management cost
Improve quality (i.e. reduce data format errors)
Reduce number of Company specific requirements
Improve data integration with business workflows
Easier to share data with partners

++

Not cover marine infrastructure
Not cover pipeline inspection
What about legacy data?
Migrating “new data formats” into existing workflows
New data loading tools needed
New data QC workflows and tools
Training

--

SSDM will be the preferred method of delivery as stated in the forthcoming OGP/ISO International Standard on Geophysical Site Investigations.



A new model, but what about old data?



The screenshot shows the Exprodat website with a navigation bar including Home, Consulting, Software, Training, Support, About Us, Blogs, News, and Contact Us. The main content area displays a blog post titled "Migrating Legacy Seabed Surveys to SSDM" dated 12/6/2012. The post discusses the value of seabed survey datasets and the challenges of managing them. A keyword cloud on the left lists terms like "2011", "ArcGIS", "CAD DEMs", "Environmental", "Exprodat", "Geology", "Images", "Intermediate", "Legacy", "SSDM", "Seabed", "Shallow Surfaces", "Survey", "attribute", "benefit", "business", "class", "consistent", "controlled", "data", "difficult", "documents", "easy", "existing", "features", "fields", "format", "framework", "imagery", "industry", "information", "integrating", "integration", "legacy", "loaded", "log", "means", "operations", "operators", "outputs", "planning", "providing", "seafloor", "share", "standards", "straightforward", "surface", and "survey". A small image of the SSDM software interface is also visible.

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Blogs

Migrating Legacy Seabed Surveys to SSDM

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Seabed survey datasets are assets of enormous value for offshore operators. Environmental, site, geo-hazard, debris and pipeline planning surveys catalogue features on and below the seafloor to support well planning, drilling and production operations - all expensive and potentially risky activities. Identifying hazards on the seafloor that can jeopardise these operations is of particular importance to operators. It is vital that such data sets should therefore be accurate, easy to use and easy to share. Recent crisis events such as Macondo and Elgin illustrate why a business should ensure this data is managed properly.

The data management challenge

The challenges with survey data stem from the wide variety of outputs produced when acquiring the data. Typical survey outputs comprise CAD files, log imagery, surface grids and many other documents. Managing such a mixture of data types can be very difficult. The task of then integrating these existing enterprise data is therefore far from straightforward.

SSDM Sample.mxd - ArcMap - ArcView

http://www.exprodat.com/Blogs/blog_Migrating-Legacy-Seabed-Survey-data-into-SSDM.htm

A new model, but what about old data?



Converting Legacy Seabed Survey Data to OGP SSDM A North Sea Case Study

Simon Kettle– Exprodat, Paul Hopgood– BP

ePUG – London Nov 2012

https://www.esriuk.com/sites/default/files/uploads/1_16.15%20Exprodat%20%20BP%20ePUG%20Presentation%20-%20SSDM%2008Nov12_v1.pdf

There's never been a better
time for **good ideas**

OGP Seabed Survey Data Model - SSDM

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