

Big Data Standardization Software For Inside the Enterprise

The World's Largest Gas
Distribution Co. Team:
Exploration & Production
- Key Facts

Revenue:

Approx. 113 Billion USD

Total Assets

Approx. 241 Billion USD

Number of Employees: Approx. 235 000

ERP Systems:

SAP ECC 6.0 for Supply Chain Maximo 7 for Enterprise Asset Mgmt. Intergraph SmartPlant – Engineering Data Warehouse

Level of In-House ERP Knowledge: Excellent project team. Deep Practical SAP MM skills.

Level of Purchasing Knowledge: High. Sourcing Innovators. Turnkey projects but recognize the need to retain asset information in-house.

Refresh License:

Refresh Desktop for all Standards Refresh Server for material create/ requisition create / change governance workflow

Live with Refresh since: 2011

Current Status:

Phase 1: support standardization of all procurement & maintenance data FEED for Exploration & Production

Regions using Refresh: UK E&P HQ London UK E&P HQ Aberdeen E&P North Sea

Refresh Languages installed:

English German Dutch French

Combined Standards in Refresh: ISO 8000 – Global Data Quality ISO 14224 – Maintenance Data O&G ISO 15926 – Automation Data O&G UNSPSC Internal SAP Material Group HTS/INTRASTAT





Refresh™ Standardization Software Customer Case Study:

Data Standards for World's Largest Gas Distributor



Business Challenge:

In 2011 one of the world's largest energy companies was facing a challenge – how to optimally manage increasing numbers of project data, assets, spares, services and suppliers across multiple projects & phases. Three major decisions had been agreed by the corporate supply chain & engineering departments: 1) to mandate to suppliers the full practical technical & purchasing data to be supplied *early at RFP/RFI stage*; 2) to build internal data knowledge in the Oil & Gas engineering data standards and purchasing specifications *in-house as a foundation* for their growing E&P assets; and 3) to make sure that these standards could be future proofed – made valid across the whole asset lifecycle & integrated in Maximo and SAP for engineering operations and procurement – not just handed over "as designed".

Great Idea But Where do we go from here?

Basically this meant that they needed standards in detail down to each attribute at Front End Engineering Design (FEED) stage, then placed on the detailed purchase specifications at sub-project tender, and then handed over in practical terms to SAP & Maximo for operational maintenance and procurement people at commissioning. The company had tried to solve the problem previously using a master data management system and outsourced data company but the underlying data and skills, particularly the characteristics and class library needed was the missing link. Procurement had selected UNSPSC as external material group for spend reporting, as well as two other important coding systems: ISO 8000 for commercially neutral material descriptions, and INTRASTAT/HTS for consistent commodity / VAT reporting. Engineering's issue was the there are many ISO Oil & Gas standards including 14224 and 15926 but none of these had the level of detail they were looking for.

The main problem remained: was there a detailed-enough global non-proprietary dictionary that procurement and engineering could easily use, right from day 1?

The Solution:

After a 3-month-long detailed proposal phase. Refresh™ was selected as the standardization toolset. Key in the selection of Refresh™ was:

- + Global International Standards experience & content
- + Pre-Built dictionary ready to use on day 1
- + Deep experience in SAP procurement data
- + Ease of use allowing the right person to do the job quickly
- + Low software license cost and low implementation effort
- + Zero interface cost (cost-free for SAP & Maximo Data)
 Refresh Desktop was deployed in English, German, Dutch
 and French within one week of purchase so the
 standardization process could start in record time.

Project Engineers <> Maintenance Engineers:

The Refresh Dictionary had always been based on ISO and so already contained a superset of the ISO standards that were interesting for the engineering community, but there remained an opportunity to include mappings from the two largest project contractors in the North Sea. Although this data tended to be valid only in the earlier part of the asset lifecycle (more process related than asset related), it was a worthwhile exercise with some new tags being included in the dictionary and the long term possibility to become more independent of the contractors tagging and I.T. system. Refresh was used for the actual mapping exercise and this, along with the internal material group to UNSPSC linking was completed in just three days.



Key Business Benefits:

- + IT lowest total cost of ownership fully reused ERP
- + No need for yet another cataloguing tool on top of ERP
- + Materials can be neutrally described open bids
- + Data Specifications available early for turnkey suppliers
- + Suppliers can build master data for us before handover
- + Project "What it does" data = more open purchase specs
 + Operational "What it is" data available before handover
- + Easy to find materials & reduced inventory carrying costs

