

Refresh™ Standardization Software

Customer Case Study:

Data Standards for World's Largest Gas Distributor

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 / PIM

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 for future supply chain ownership.

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

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
Refresh Technical Material Ontology
SAP Graph Ready Domain-Specific
Ontology and Spares Class Library
HTS/INTRASTAT Tariff Codes



Business Challenge:

A key business issue for large energy companies is how to optimally manage CapEx represented by increasing 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 Intergraph, PIM, 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 & 15926 but none of these had the right level of detail.

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 with the right ontology**. 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 are not 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 taxonomy 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 contractor's 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, bringing engineering design and maintenance on to the same page.

Refresh ISO 8000 Dictionary for Oil & Gas



Ontology Ready for agents, S/4 & everything after

Key Business Benefits:

- + IT lowest total cost of ownership + SAP Data AI-Ready
- + No need for yet another cataloguing tool on top of SAP
- + 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