EAGE/EUROPEC Conference
Amsterdam, June 2009

Shell's 12 safety rules[1]

EAGE attendance was low, particularly noticeable at the plenary sessions with only around 50 present for the Mature Basins session and only 20 at the start of the HSE[2] session. The organizers need to take a rain check as to what is really of interest to attendees. Perhaps we should too, after all, what is 'Mature Basins' and HSE to Technology Watch? Well, the answer to that is twofold – we can only report on what actually goes on in these shows even if they are somewhat peripheral to our technology focus. Also such 'industry at large' presentations broaden the mind and also provide a snapshot of the extent to which technology underpins the diverse workflow of the upstream. Note the 'extent' qualifier. In the Mature Basins session, contributors gave their own companies or themselves most of the credit for their success, although technology, in the form of direct hydrocarbon detection and **Schlumberger**'s Petrel, did get a mention.

The impression given in the HSE session was that industry safety is improving but that there is no room for complacency. There is a marked shift in risk from oil company employees to contractor personnel. Road traffic accidents make up the majority of fatalities. **Shell** has introduced '12 life saving rules' which apply to all Shell and service company personnel. A presentation from a Dutch aviation safety expert discussed the human factor in accidents, human-machine interaction and the use of standard operating procedures.

'Uncertainty management' is an extremely popular field. **BP** presented use of its 'Top Down Reservoir Modeling' approach to facility design/sizing of an Angolan FPSO. **Shell** (with **Sonardyne**) has successfully deployed an acoustic sea floor subsidence monitoring system to help plan 4D seismics on Ormen Lang. Seismic acquisition continues to get more and more esoteric. A **WesternGeco** presentation introduced the use of near simultaneous multiple sources shooting into a complex wide azimuth recording array. The **Paris School of Mines** and **IBM** are adapting 'dusty deck' seismic migration algorithms to the new world of multi-petaflop computing. It is expected that million shot migration workflows will be realizable on tomorrow's 100,000 plus core machines. At the entry-level end of the technology spectrum, **Google** Sketchup and open source software like **Collada** and **GeoTools** are extending geographical information systems to 3D geology. **Adrok**'s low powered 'invisible' laser light exploration system that is claimed to 'see' up to 4km deep with near perfect correlation with lithology was met with considerable skepticism. On the exhibit floor, novelties included **Fugro-Robertson**'s Plate Wizard – an ArcGIS-based plate tectonic reconstruction mapping tool, a 'virtualized workstation' running GeoFrame (on Linux) simultaneously with Petrel (on Windows).

Highlights

Mature Basins Session
HSE Session
BP's uncertainty management
Preparing for multi-petaflop computing
Open Source – Sketchup, Collada, Google Earth
Virtualization on the desktop

[1] *Imagery © Shell.*
[2] *Health Safety and Environment.*

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