

UK-Norway Trip Report

Itinerary and Meeting Notes

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11-22 October 2010

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1 Introduction

In the 2009/10 we made provision for a Skills Office trip to Europe (and committed to PGWC to make one) for the purposes of benchmarking training standards and identifying suppliers who could help us with skills development in this part of the world. We were not in fact ready to make this trip during the past financial year and spent additional time laying the groundwork for a maximally productive trip. The trip was completed recently and comprised a two week trip to the UK and Norway from October 11-22, 2010 in which we visited industry associations, training providers and standards bodies in Trondheim (Norway), the London area, Portsmouth, Aberdeen and Northeast England where our partner organization NOF Energy is based. Warwick Blyth (Executive Director) and Adrian Strydom (Skills Office Manager) from the South African Oil & Gas Alliance and Claude Orgill from PGWC.

At the outset we set a number of objective for the trip:

- To identify potential training providers who could be involved in the proposed “Oil and Gas Academy” that we are looking to create in SA and understand their interest and ability to be involved;
- To get a deeper understanding of the standards and curricula being used for various types of oil and gas training.
- To meet with industry associations and bodies with similar missions to SAOGA so as to gain some insight into best practices in this regard;
- To provide an opportunity for Claude Orgill of PGWC to accompany us (at PGWC expense) and understand more about the industry he is currently supporting;
- To lay the groundwork for a subsequent trip by Northlink College (probably without direct SAOGA involvement) that will help them improve their training capability for our sector. We would expect to pay part of the costs of this trip as agreed but will expect proper motivation from Northlink prior to the trip.

The report which follows is a detailed account of the trip on a meeting-by-meeting basis and is intended to share the benefits of the detailed insights and experiences we had with the broader audience of the SA Oil and Gas Alliance and our stakeholders. We would also like to acknowledge the assistance given us in arranging this trip by UKTI and Innovation Norway – they added greatly to the quality and variety of people we were able to meet and we are grateful for this.

2 Sunday 10 October 2010 – Depart Cape Town

2.1 Travel

2.1.1 Flight SAA Cape Town->London Heathrow dep 18h40

3 Mon 11 October 2010 – Aberdeen, UK

3.1 Travel

3.1.1 Flight arrives London Heathrow 06h20

Flight arrives as scheduled at Heathrow. AS, CO separate at arrivals as they are on a later flight to Aberdeen. Several hours spent in domestic terminal waiting for flight to Aberdeen

3.1.2 Flight BD London Heathrow to Aberdeen 10h15-12h00

Arrive Aberdeen as scheduled and take taxi to Holiday Inn Express hotel in the city centre where we will be staying.

3.2 Meeting – Aberdeen Drilling School 14h00-15h00

3.2.1 Meeting Participants

- WB
- Lesley McBride (Accounts/Admin Manager – ADS)

3.2.2 Organisation Description

Aberdeen Drilling School (ADS) is a provider of well control and well intervention training. They run courses all over the world and are IADC (the US based International Association of Drilling contractors) & IWCF (EU/Africa focused International Well control Forum) accredited trainers. Certification is required every 2 years for personnel in the industry.

3.2.3 Meeting Summary

The meeting was held at the request of Nurjhan Narker at Ostrac as they are considering a partnership/agency arrangement to do training with ADS in sub-Saharan Africa. The intention was for SAOGA to visit and provide them with a general overview of upstream developments in SA and the region as well as an overview of SAOGA and its activities. We also outlined our general intention to create an upstream training hub in South Africa and explored whether it would be feasible for ADS to participate in such a project given their need for specialized equipment etc.

The discussion around their capabilities established that they are a specialized and competent training provider in their field. We also established that their courses can be offered anywhere as portable versions of rig control panels etc can accompany their instructors on trips. In essence all that is required is a room with projection equipment and they regularly offer courses in hotels, company training rooms etc.

They have a catalog of courses but also develop bespoke courses for specific companies and even specific wells. Their main base is Aberdeen (4 permanent instructors – 2 who regularly travel) with a secondary centre in Kuwait (2 instructors). They also draw on a pool of contract staff.

Typical courses on offer run for a week with 4 days of instruction and an exam on the final morning. Depending on the accreditation body this exam will either be inviolated by ADS or by a third party (typically the British Council for IWCF courses). Course costs are typically based on an instructors day rate with 5 days plus 2 days travel. Maximum class size is 8 and minimum is not a concern as long as rate is paid – they travel business class on long haul.

It should be noted that Lesley McBride is not a decision maker at ADS and has limited technical knowledge about the courses. The key decision maker Tom Donnelly (Head of Marketing & Sales) was away during our visit.

3.2.4 Possible Next Steps

- There's a clear next step here for Ostrac to continue its engagement with ADS
- Then either through Ostrac or with ADS directly we could include their course offerings in the MOGA catalog – this would require discussion with Tom Donnelly to agree and finalise

3.2.5 Priority for Further Engagement – Low (assuming Ostrac partners with them), Medium otherwise

3.3 Meeting – Achilles FPAL 15h30-16h30

3.3.1 Meeting Participants

- WB
- Alistair Mackenzie (Director Oil & Gas)
- Craig Thomson (new member of FPAL team)

3.3.2 Organisation Description

Achilles Group core business is providing supplier management tools across the industry. FPAL is a core product they developed in 1996 for reducing supply chain costs in the UKCS upstream – originally as part of a PILOT initiative. Achilles has a number of other such databases/tools in other sectors as well and is a London based company.

3.3.3 Meeting Summary

Meeting was essentially a description and demonstration of the FPAL system followed by a discussion on possible next steps for them and how this might impact us.

FPAL is essentially an O&G supplier directory for use by upstream buyers. Buyers (GBP??pa) and suppliers (GBP656pa) pay for access to the system and there are currently 84 buyers (focused on UKCS) and 2950 suppliers on the system – 60% of suppliers in UK the rest elsewhere but mostly in mainland Europe. Once the fee has been paid subscribers have unlimited access to the system. FPAL is operated on a for-profit basis.

The basic process of FPAL registration for suppliers is straightforward. An online registration is carried out during which the supplier provides information about themselves and their products – they have a nice hierarchical classification system for defining product and service area. Information is verified/quality checked after entry by Achilles using some desktop checks but there is no technical verification. A more advanced registration profile will allow Achilles to give the company a rating and this could also be supplemented by a verification audit in which Achilles visits the company to conduct an H&S audit.

FPAL is mostly a tool to help buyers find suppliers. Once buyers have used suppliers there is a feedback system (similar to that you see on amazon.com) that essentially allows buyers to rate suppliers. The number of sales and buyer satisfaction of a supplier is then visible to other potential suppliers. Perhaps it is helpful to think of FPAL as an amazon.com for selling upstream products and services except that the transactions take place between the buyers and sellers without FPAL involvement.

At this point in time FPAL is really only focused on the UKCS. They have recently deployed the tool in Nigeria for NNPC (the sole buyer) and have supplemented the audit process here by having technical verification checks on the registered suppliers.

We discussed the possibility of extending the system into the broader African market. It seems they are very interested in growing their international business and would like to tackle other regions. Achilles however is busy integrating the various regional and sector systems into a new technology platform that will allow them to run the whole business on a single platform. In conjunction with this they are considering their next steps internationally.

We expressed interest in participating in efforts to drive FPAL system into Africa and there is potential interest but no action will be taken until they have decided their expansion strategy.

3.3.4 Possible Next Steps

- Stay in touch and check back with them on their international expansion strategy. Be prepared to work with them further as and when they are interested in an African effort.
- It may also be prudent to create another system modeled on the FPAL system but built using a different technology platform and not involving FPAL.

3.3.5 Priority for Further Engagement – Medium

3.4 Dinner – Rustico Italian restaurant near hotel in central Aberdeen

3.4.1 Participants

- WB, AS, CO

3.4.2 Description

AS, CO arrive on late afternoon flight from London Heathrow and after meeting at hotel we go out for a meal at nearby restaurant

3.5 Hotel – Holiday Inn Express Chapel Street Aberdeen

4 Tue 12 October 2010 – Aberdeen, UK

4.1 Meeting – Univation Robert Gordon University 09h00-10h30

4.1.1 Meeting Participants

- WB, CO, AS
- David Brand – Business Development Manager Univation

4.1.2 Organisation Description

Univation is the business development arm of Robert Gordon University and is tasked with selling the University's short and full course offerings to the international market - companies and universities across the world.

4.1.3 Meeting Summary

We provided David Brand with an overview of SAOGA and the ideas around the MOGA. He provided us with an overview of what Univation does and some of their projects:

- Currently implementing a GBP5.7m with PDVeSA contract to implement a range (from MSc to 25 O&G specific vocational short courses) of O&G related programmes in a new Venezuelan hydrocarbon university;
- Working with Ghana to help them establish an O&G training hub in West Africa; this involves UK DIFD and they have a local private partner (PSDI) in Ghana;
- Just finished running a number of O&G related short courses for Tullow in Ghana; introduction to O&G concepts for top level stakeholders and politicians in Ghana;
- Short courses for Sontrac in Algeria (their biggest customers);
- MOUs with universities across the world.

RGU short courses are generally constructed from modules of their masters programmes. They are very interested in participating in the MOGA and the nature of their courses is such that it is easy for instructors to travel and present material remotely. They admit to being expensive (5 day course in Petroleum economics ~GBP17K for 30 students) but there are different funding models that can be followed:

- For Venezuela they work on a cost per head basis GBP30K/head for the MSc programme. This is high because Venezuelans insist on using active industry experts as instructors. In time the Venezuelans will run the courses under license
- With their private partner in Ghana they offer courses at their cost rate (instructor day rate plus costs) and the partner is responsible for “putting the bums on the seats”;
- RGU also works through agents in countries. This can be on a commission only basis while some are on a day rate and commission.

4.1.4 Possible Next Steps

- Univation is very keen to participate in the MOGA – it fits with their core mission and as long as they generate their revenue there is very little downside to participating;
- RGU courses would be obvious candidates for inclusion in a MOGU catalog offering;
- Probably would make sense to negotiate some sort of cost deal with them as they have in Ghana or perhaps with some degree of risk sharing.

4.1.5 Priority for Further Engagement – Medium

4.2 Meeting – Step Change in Safety 11h30-13h00

4.2.1 Meeting Participants

- WB, AS, CO
- Ian Crossen
- Dave Nicholls

4.2.2 Organisation Description

Step Change in Safety is an industry body that falls under the auspices of Oil and Gas UK. It's specific mission and task is to “make the UK the safest place to work in the O&G industry”. They are a partnership of regulator, industry (86 paying members) and unions and focus on identifying safety issues for the industry and then developing through workgroups appropriate responses, procedures and guidelines for dealing with them. They are not a training body but more of policy unit/industry think tank for safety issues

4.2.3 Meeting Summary

Ian and Dave outlined what Step change in Safety is and the work they do. The mode of working was particularly interesting as model that we should be looking to drive into SAOGA's practices. The “Leadership Team” is the main oversight body as is largely drawn from industry. It meets every October for a planning meeting is responsible for creating the work agenda and then initiates the workgroups that actually do the work around the identified issues. Each member company nominates a “focal point” person who will participate in the quarterly network meetings – these meetings review material from the workgroups. Workgroups are drawn from industry and are co-chaired by a leadership team member and another person. They are responsible for making recommendations and drafting the relevant documents. Workgroup outputs are not regulations and are not forced on members but because industry themselves develop the guidelines they generally get adopted by industry.

Step change initially focused on developing guidance but now have an equal focus on getting companies to adopt these guidelines.

There are 5 staff at step Change for Safety – Ian is seconded from a member company for a 2 year period while the others are seconded from Oil & Gas UK. People at senior levels in companies gain prestige from association with step Change and there is a keenness amongst industry members to participate.

There are 3 UK organizations that deal with the skills issues: step Change, OPITO and Oil and Gas UK. O&G UK tends to focus on strategic workforce planning whereas Step Change identifies immediate industry training needs around HS. OPITO certifies training. Jessica Burton at O&G UK is the Skills person

MIST is the basic standard that needs to be complied with for offshore work in the UK and OPITO certified training for this is provided by Atlas Interactive – an elearning provider that SAOGA has worked with in the past year.

Step Change came out of the PILOT initiative (see later meeting) and works with the H&S regulator in the UK – it is considered to be a good model of how government and industry work together. The step Change website (www.stepchangeinsafey.net) makes most of their output available free of charge in electronic form.

4.2.4 Possible Next Steps

- Ongoing contact with Step Change in Safety to maintain links and relationship
- Regular use of their website and material to drive H&S practice in our industry

4.2.5 Priority for Further Engagement – Medium

4.3 Meeting – ODL (part of Wood Group) 14h00-15h00

4.3.1 Meeting Participants

- WB, AS, CO
- June Cormack (Business Development – met at OTC10)
- John Singer (about to retire)
- Liz Thornton (Training & Competence Services Manager taking over from John)

4.3.2 Organisation Description

ODL was set up to do technical documentation and training came naturally from this. The company's core business is that they consider themselves the foremost provider of competence systems. This means they develop and implement competence frameworks, predominantly for operations environments. They also work with Scottish Qualifications Authority (SQA) to develop standards that relate to worksite competence. Their African involvement is focused on North Africa and Equatorial Guinea

4.3.3 Meeting Summary

Meeting started with presentation to WB, AS, CO of ODL scarves woven in the pattern of the official ODL Scottish tartan pattern – these were very useful in the subsequent cold weather!

ODL people described the company capabilities and focus as well as some of their engagements. They generally work to set up a competence framework and then handover. A good example of this is their work with the Trinidad Energy Chamber.

A competence system:

- People are required to demonstrate competence at their job;
- Set performance criteria based on national guidelines; will be site specific criteria;
- People are trained and then assessed against the standard
- ODL will supply the system which needs to be auditable
- Training and competence are separate; competence system sets a standard and approach for assessing it – sometimes reveals a training need

A brief tutorial was also provided on the way that qualifications frameworks approval works – ODL works closely with the Scottish Qualifications Authority (SQA) in a lot of their competency system definitions. They indicated that there is a trend away from national standards to site specific standards and competence systems. These would generally be variants of a general standard which can usually be found with an internet search.

They also do some training and have capability to do pipefitting, welding etc

They agreed to send us some website references around SQA and standards as well as info on their training capability.

Meeting ended with them mentioning recent Wood Group acquisition of LBJ in Jhb.

4.3.4 Possible Next Steps

- ODL could play a role in helping the harbour MMO industry to develop competence systems for their operations. Perhaps this could best be done by introducing them to some of the main contractors.
- Make contact with the LBJ (now Wood group) company in Jhb.

4.3.5 Priority for Further Engagement – Low for now

4.4 Meeting – NSL (North Sea Lifting) 15h30-17h30

4.4.1 Meeting Participants

- WB, AS, CO
- Derek Emslie (Global Sales & Marketing Manager)
- Anna Pietranek (junior employee – lawyer by training)
- Also met Martin Waite (Global Technical Manager) at the training centre

4.4.2 Organisation Description

NSL is a lifting training company with 20 years in the business and directors who have 10 years more experience before that. They are leaders in the offshore lifting training market and have a specific focus on lifting for O&G. They also have a strong elearning offering and a training centre near Aberdeen airport which we visited. They also offer the only subsea lifting training course in the world (as we understood it).

4.4.3 Meeting Summary

WB presented a short overview of SAOGA and what we do. Derek then presented an overview of NSL:

- Company is 20 years old
- Founders started in inspection and maintenance of rigging gear
- Do practical training and have EAL competence (UK engineering competence body)
- Practical training can be offered in Aberdeen or elsewhere except for their unique subsea lifting & rigging course which has to be offered in Aberdeen because it requires a large tank at the Hyperbaric Centre
- HQ in Aberdeen with ops in Houston, Lafayette, presence in Caspian with BP and associates in Baku
- Mostly focused on O&G
- Have an extensive elearning offering as well

Visit ended with a trip to their training centre near Aberdeen airport – a small centre with 3-4 training rooms and a large indoor warehouse area with various rigging and lifting training stations.

4.4.4 Possible Next Steps

- They are interested in training opportunities through the MOGA idea and would participate
- NSL would probably be a preferred provider for lifting training material and courses.
- There could be opportunities for a partnership with one or more of our members; in particular there may be an opportunity for one of our diving schools to offer their subsea lifting course

4.4.5 Priority for Further Engagement – Medium

4.5 Dinner – Littlejohns Restaurant nr Robert Gordon University in central Aberdeen

4.5.1 Participants

- WB, AS, CO

4.5.2 Description

Ordinary meal in ordinary restaurant; the Belhaven 80 Shilling Beer was however good!

4.6 Hotel – Holiday Inn Express Chapel Street Aberdeen

5 Wed 13 October 2010 – Aberdeen, UK

5.1 Meeting – IESTA 09h00-11h30

5.1.1 Meeting Participants

- WB, AS, CO
- Gary Boyd (Director of Operations) IESTA

- Susan Fraser (Training Services Manager) Sparrows Training
- Jenni Stewart (Business Development Manager Training) – EnerMech
- Roddy Scott (Renewables & Energy Development Manager) AngusCollege/also IESTA Chairman
- Craig Duncan (standing in for MD Douglas Hay) Aberdeen Drilling Consultants
- Fae Milne (PA to MD) ESD Simulation Training
- Colin Turnbull (MD) Mintra/deputy chair IESTA
- Alan Pollock (VP Global Sales) Atlas Interactive

5.1.2 Organisation Description

IESTA (International Energy Skills & Training Alliance www.iesta.net) is an association of Scottish training providers focused on helping its members market their training offerings. To customers the organization offers the possibility of being a “one stop shop” for a variety of offerings. Organisation has recently got Gary Boyd on board after a period of seemingly little progress

5.1.3 Meeting Summary

Gary did a presentation on IESTA

- Focus areas North African, West Africa, middle East
- 3 years old
- Partly funded by Scottish Enterprise
- Board comprised of member
- Industry partners include NOF Energy and African Business Centre (Aberdeen Chamber)

We presented an overview of SAOGA and then were introduced to the various companies in the room. Some are dedicated training companies while others are training arms of larger groups. Enermech was interesting because they have just opened an office in Cape Town and are looking to partner here – their core business is hydraulics and lifting

5.1.4 Possible Next Steps

- Establish a formal partnership with IESTA so as to have an open and recognized channel of cooperation and collaboration – they have sought this.

5.1.5 Priority for Further Engagement – High

5.2 Meeting – Atlas Interactive 12h00-12h40

5.2.1 Meeting Participants

- WB, AS, CO
- Alan Pollock (VP Global Sales)
- Andrew Imrie (Director Sales & Marketing)
- Harry van der Vossen (COO)
- John Rowley (CEO)

- Julie Scholey (Account Manager – for SAOGA)

5.2.2 Organisation Description

Atlas Interactive is a leading elearning provider. Notably they have worked with the UK industry to develop the mandatory MIST offshore safety courses for all workers going offshore. We have previously purchased product from them for our elearning trials.

5.2.3 Meeting Summary

Impromptu visit to the company arranged by Alan Pollock after the IESTA meeting. A quick tour of the company and meeting with key people with whom we might be involved. WB had previously visited in September 2009.

5.2.4 Possible Next Steps

- Procurement of additional elearning material
- There is a possibility of acting becoming an approved Atlas training centre. This could be very useful to provide a training point for HSE around our local industry.

5.2.5 Priority for Further Engagement – High

5.3 Meeting – Aberdeen University 13h00-15h00

5.3.1 Meeting Participants

- WB, AS, CO
- Dr Stuart Archer (Coordinator ExploHub)
- Dr Neil Renton (School of Engineering – ChemEng)
- Prof Russell Howe (Chemistry)

5.3.2 Organisation Description

Aberdeen University is a 500 year old university with a long tradition in classics education. It has developed a renowned geology and subsurface programme but are relative latecomers to the engineering side of the industry. Their chemical/petroleum engineering programmes are very new and we met with the prof who established it.

5.3.3 Meeting Summary

We met with three different people in succession as listed above. The ExploHub is a new diploma they are launching in January to provide a masterclass in honing practical exploration skills of working explorationists. The idea is for companies to send a person to the ExploHub for 9 months for an intensive experience of working on exploration skills using real data and working in a simulated work environment with a group of subsurface experts under the guidance of experienced industry veterans.

The idea is to hone the art and science of exploration. They also plan to use real data from companies for students to work on so there are opportunities for companies to provide data and analysis.

A short conversation with Russel Howe who is a chemistry prof. Not particularly insightful but he did provide us with some insight into the courses available at University of Aberdeen.

Last meeting was with Prof Russel Howe who has set up their new chemical engineering programme. The main takeaway from this meeting is that he is probably the most experienced person in the UK at setting up a new engineering programme and might be a useful contact for people at UWC who are currently considering such a programme.

5.3.4 Possible Next Steps

- Connect ExploHub with Petroleum Agency and/or some of the local operators
- Make PetroSA and others aware of the ExploHub opportunity for their explorationists
- Look to see if we can connect Russel Howe with the key chemical engineering departments in the Western Cape

5.3.5 Priority for Further Engagement – Low

5.4 Meeting – PILOT 15h30-16h30

5.4.1 Meeting Participants

- WB
- Bill Cattanach (Head of Pilot Secretariat, UK DECC)

5.4.2 Organisation Description

PILOT is more an initiative of the UK Department of Environment and Climate Change than an organization. It was created in the late-1990's to improve the competitiveness of the UK industry in the face of declining oil prices. IT has a small secretariat but is mostly a series of industry working groups that address various issues e.g. safety, supply chain costs etc. It came out of an older organization called the Offshore Supplies Office which was set up by the UK government to promote local industry as UKCS was dominated by US companies at the start.

5.4.3 Meeting Summary

After a short intro to Bill about SAOGA he described PILOT and its history. Some key points:

- Started 40 years ago as Offshore Supplies Office and mostly used a “stick” (renewal of licenses) to get operators to procure locally
- In the 1990's the stick approach was reduced as the UK found it harder to be competitive – PILOT was launched to improve UK competitiveness as a collaboration between operators, supply and government. This had a bunch of initiatives
 - Improvements in the supply chain – CRINE (cost reduction), FPAL came out of this

- Realised was important for suppliers to have advance knowledge of project and started annual “share fair” in which operators and tier 1s come together and present opportunities to industry
 - Now looking to make this web-based
 - Operators pay for the share fair which is open to anybody – 700-800 people attend in Aberdeen
- ITF technology initiative from PILOT
- Subsea UK one of the newer (self-funded) spinoffs
- Decomm North Sea is a new org to look at the decommissioning issues etc
- Opinion on skills training initiatives is that companies will take care of this if the work is there (no need for public involvement)
 - Some of the OPITO standards also an outworking of PILOT though
- PILOT model
 - Operated by DECC (Bill & 2 others) with GBP200K per year
 - Workgroups are driven by industry
 - Current issue areas
 - Access to infrastructure
 - Decommissioning
 - EOR
 - Fallow initiative to force use of blocks
 - Brownfield opportunities
 - Prefer a cooperative approach to regulation in the industry
 - Made PILOT quite elitist so top industry execs want to be on work groups and PILOT executive – chaired by UK Energy Minister
 - PILOT summit held once a year with large gathering of industry to set priorities – these are boiled down by secretariat
- There is still plenty of industry support for PILOT with 25 years more activity in North Sea projected with up to 25bn barrels remaining to be produced.

5.4.4 Possible Next Steps

- Continue to track PILOT initiatives and access material and reports from their website
- Stay in touch with Bill Cattanach
- Consider an SA version of a share fair

5.4.5 Priority for Further Engagement – Low

5.5 Travel (WB)

5.5.1 BMI Flight dep Aberdeen 20h00 arr London 21h40

Drink at Soul Bar on Union Street Aberdeen to access internet and plan London travel. Taxi to Aberdeen airport. Arrive London as scheduled and take Heathrow Express to Paddington followed by taxi to hotel.

5.6 Travel (AS, CO)

5.6.1 Depart Aberdeen 16h00 for Durham by train.

5.7 Hotel – Travel Lodge, Union Street, Southwark, London

Overpriced and pretty basic – rip-off Britain at its best!

6 Thu 14 October 2010 – E&Y London, UK

6.1 Meeting – Ernst & Young Africa Investment Discussion 10h00-14h00

6.1.1 Meeting Participants

- WB
- MEC Alan Winde (PGWC)
- Solly Fourie (Head DEDAT PGWC)
- Nils Flaaten (acting CEO Wesgro)
- Andy Brogan (Partner Global O&G) E&Y
- Sue Batchelor (Director Global Oil & Gas Centre) E&Y
- David Harrison (Market Director Global O&G Centre) E&Y
- Michael Laylor (E&Y Cape Town)
- Glen Makinson (Senior Manager) Wood Group Production Services
- Others were also in attendance who I was not introduced to: BAT, several other E&Y people etc

6.1.2 Organisation Description

E&Y – the audit firm have been arranging a series of informal Africa investment discussions for their clients in various fields. They have also developed a reasonably nice interactive mapping tool that allows a layering of various economic, company, demographic etc data onto an African map.

6.1.3 Meeting Summary

I attended the Oil & Gas Session of the seminar which was held in a room configured with 6 smart boards for showing multiple displays simultaneously and to create an informal atmosphere. I presented on SA upstream and opportunities and a discussion followed. Overall the meeting was disappointing because aside from the E&Y O&G practice leaders the only significant person was from Wood Group. We did have a chance however to discuss their recent acquisition of LBJ in Johannesburg and the possibilities for using this to bulk up their O&G presence in the region.

6.1.4 Possible Next Steps

- Meet with Michael Laylor from E&Y in Cape Town
- Follow up with a meeting with LBJ in Jhb – together with Wesgro.

6.1.5 Priority for Further Engagement – Low

6.2 Travel

6.2.1 Train to Durham dep 15h30 London via Kings Cross arr Durham 18h00

6.2.2 Taxi to Premier Inn at Belmont Business Park

7 Thu 14 October 2010 – TTE Newcastle, UK

7.1 A day tour of TTE facilities - AS and CO

7.1.1 Organisation Description

The TTE Technical Training Group is focused on the delivery of training services to the Oil and Gas, Manufacturing, Engineering and Petrochemical Industry. This is an example of a Training Group that developed from industry. TTE prides itself in retaining a close relationship with industry and provides practical training in a safe industry-like environment. It provides Apprentice, Mature Technician and Graduate development training at its two campuses, the one which is situated in a petrochemical refinery site. Safety consciousness is an organizational strength.

7.1.2 Meeting Summary

- Nigel Ellenor of TTE collects AS and CO in Durham. Drive to Middlesbrough – Wilton International Visitor Centre – Security pass issued and safety induction done – 9h30
- Welcome and introduction to the Centre Management - 10h00
- Tour the TTE Wilton Training Centre. Observe Nigerian and Equatorial Guinean trainees in action. Visit ProSIMM, Compex facilities, QVF distillation units and pilot process plant.
- Lunch meeting with Sara Marshal, TTE Commercial Director and Nigel Ellenor 12h15
- Transfer to TTE Southbank Training Centre where the focus is on Apprentice Training. Welcomed by Andy Buckworth Strategic Development Manager 13h15
- Tour of workshop facilities while Andy Buckworth and his team discuss the UK Apprenticeship model 14h00
- Meet and Q and A session with TTE Group Managing Director, Keith Hunter and Nigel Ellenor- 15h30
- Nigel Ellenor drops AS and CO at hotel in Durham 16h50

7.1.3 Summary

The industry focus is a feature that should be replicated at FET Colleges in South Africa. TTE Process, practices and structures reflect that of industry. This allows for practical training in a safe industrial environment. A large percentage of the TTE advanced apprentices progress to study at university. TTE has a vibrant job placement process in place. It has a global focus, marketing itself internationally.

7.1.4 Possible Next Steps

- Meet with Northlink College CEO to discuss a future visit to TTE with the view of replicating systems and processes where possible.
- Facilitate a visit of Northlink College to TTE and explore the possibility of a partnership.
- Support FET Colleges to establish learning pathway models that will bridge the College-University divide, using TTE and other similar institutions as best practice examples
- Develop the capacity on African soil to provide quality technical training to Africa. South African training institutions can learn much from its global focus and how TTE markets itself as a global player
- TTE is prepared to assist with replicating their training systems and 'true to industry' training centre design. This is an area that should be encouraged and followed through
- Training standards lessons can be learnt
- Control room training can be replicated without having to 'reinvent the wheel'
- It is advisable to further explore wind turbine technician training in the area

7.1.5 Priority for Further Engagement – High

7.2 Travel (WB)

7.2.1 Train to Durham dep 15h30 London via Kings Cross arr Durham 18h00

7.2.2 Taxi to Premier Inn at Belmont Business Park

7.3 Hotel – Premier Inn Belmont Business Park nr Durham

Set meal included dinner with AS at hotel restaurant

8 Fri 15 October 2010 – @NOF Energy Durham, UK

8.1 Meetings – NOF Energy @NOF Energy 10h00-11h30

8.1.1 Meeting Participants

- WB, AS, CO
- Joanne Leng (Business Development)
- George Rafferty (CEO)

8.1.2 Organisation Description

NOF Energy is a SAOGA partner organization with an original mandate and structure very similar to SAOGA's but focused on the Northeast of England. IN the past 5 years they have refocused to become focused on business development assistance for their members. They have also broadened their membership from Oil & Gas to the energy sector generally i.e. they include renewables and also nuclear.

8.1.3 Meeting Summary

Aside from the usual relational catch up with Joanne and George we followed up on a conversation started at OTC in May this year regarding the internationalization of NOF membership and services.

They have taken a decision to open their membership to international firms and also to allow their partner organizations through a group membership status (which SAOGA would have) to have their members partner in their overseas missions. We have been thinking about partnering in order to create high quality trade mission and market access opportunities for our members and access to NOF trips would fit this objective – they are also able to leverage the UKTI network when setting up trips. For African trips, working with us could allow the benefit of accessing networks via both UKTI and SA’s DTI. In general though we noted that their focus for market development is in Kazakhstan and Brazil rather than Africa.

The second area of joint marketing potential is that NOF is interested in sharing stand space at OTC 12 and we discussed the idea of creating a bigger stand perhaps with a number of global associations that fit into the NOF/SAOGA partner network. Definitely an idea to be explored further.

Other topics discussed were their work in the renewable sector. They provided some useful info and suggested with look at the “Crown Estates” website for a list of developers in the field. BVG associates is a specialist wind trainer. In general George is still skeptical of the political sustainability of the renewable sector and is concerned that renewable activity is crowding out O&G fabrication capacity in the North Sea.

As always I look for some insight into how they run their organization and was interested in how they know their members. They do twice a year survey (30% response rate) and spend a lot of time with members – George aims to spend some time each day with members (far short of our current practices)

8.1.4 Possible Next Steps

- Consider joint arrangement of stand for OTC12
- Formalise arrangements around allowing our members access to their mission trips (at member expense).
- Maintain close contact with them

8.1.5 Priority for Further Engagement – High

8.2 Meetings – Skillogy @NOF Energy 11h30-12h30

8.2.1 Meeting Participants

- WB, AS, CO
- Mile Bolam (MD)

8.2.2 Organisation Description/Meeting Summary

Skillogy is a company focused on leadership development and training. They have existing relationships with 2 South African entities: Resolve Group (Lindsay Falkov) and Da Vinca Institute. They also have partner in CT called Bridgewater (MD is Frank Smit) who do course and content development.

We had a general discussion about their work and also a lot of input about Mike’s experience in Africa, O&G etc.

8.2.3 Possible Next Steps

- Next step is to meet with Lindsay Falkov in Jhb and see what if anything there is to build on

8.2.4 Priority for Further Engagement – Low

8.3 Meetings – GL Noble Denton @NOF Energy 12h30-13h30

8.3.1 Meeting Participants

- WB, AS, CO
- Andrew Wilde (BD Manager Software Solutions)

8.3.2 Organisation Description/ Meeting Summary

GL Noble Denton is essentially an 8000 person engineering consultancy group with origins in the maritime and offshore sector. They also have a training capability, write standards and even legislation. In terms of training capability they have some strong offerings around pipelines & distribution and have their own internal training academy that also has a variety of online offerings . We also noted that they have a hydraulic training consultancy. They would be very interested in offering training in SA and typically would work on the basis of an instructor rate of GBP1000/day. They also have current links with SA – Andrew Wilde has strong longtime relationship with Dave Wellbourne at Ilitha who they consider to be their local partner. GL Noble is involved in the control of Sasols Mozambique pipeline. They are also linked to an SA company called Water Flow Systems (Jonathan Levy)

8.3.3 Possible Next Steps

- Definitely a company to include in the MOGA offerings
- Also would be interesting to pursue their offerings in hydraulic training as we are recognizing in our company visits that this is a training gap in the local industry.

8.3.4 Priority for Further Engagement – Medium

8.4 Meetings – OilCareers.com @NOF Energy 13h30-14h30

8.4.1 Meeting Participants

- WB, AS, CO
- Rowena Simpson (BD Manager)

8.4.2 Organisation Description/Meeting Summary

Oil careers is the largest online O&G jobsite. Part of the JobSite group which is part of A&N media/Daily Mail Group which also runs Adipeec, Gaspec etc. Started 12 years ago. They have a popular website (1/2 million users) and extensive mailing list which are both for “sale” in terms of advertising placement and mailshots. Specifically they can do banners on their site and run targeted email marketing campaigns. They also have a small training section on their site which advertises training courses. We could potentially also use the site to extract information about regional activity based on job postings.

Some indication of advertising rates was also obtained in the meeting:

- Banner ads on home page ~GBP1250/month
 - Banner on a job page ~GBP500/month
 - Email banner: GBP1250-1750 per targeted mailshot of upto 10000 emails
- Lastly, we noted a reference to an elearning company called Cognition Media which is doing some interesting stuff with flash drive based material.

8.4.3 Possible Next Steps

- In general I'd view this kind of internet driven centralized business model as a threat to regionally based recruitment services so oilcareers.com is primarily a competitor to some of our members.
- There may be use in placing some advertising or having members place advertising on their site.
- Also should browse the site and perhaps work with them to extract market intelligence around where the recruiting hotspots on the continent are – could be a good way to find out about investment in SA too.

8.4.4 Priority for Further Engagement – Low

8.5 Meetings – COLU Teesside University @NOF Energy 14h30-15h15

8.5.1 Meeting Participants

- WB, AS, CO
- Dr Leo Guevara (Business Account Manager)
- Chris Hoggarth (Director COLU) withdrew at last minute

8.5.2 Organisation Description/Meeting Summary

COLU is the distance learning unit of Teesside University. It originally came out of ICI as did TTE which was visited by AS the previous day. They offer correspondence courses in technical subjects at levels that are roughly in line with the old SA technicon level and providing bridge to degree programme. Technically they offer the UK HND/HNC qualifications. They are currently working with a University in Ghana where courses are supplied at GBP1200/module. They would be interested in some relationships with SA universities. We also saw examples of some of their course material which looked well prepared and comprehensive.

8.5.3 Possible Next Steps

- Didn't see immediate next steps at this stage
- As we engage the higher education sector and identify needs for this sort of material it may be worth exploring linkages with COLU - pricing would be an issue though

8.5.4 Priority for Further Engagement – Low

8.6 Meetings – TDB Training Specialists @NOF Energy 15h15-16h00

8.6.1 Meeting Participants

- WB, AS, CO

- Tracy Blades (Founder and Director)
- Tony Roxburgh (MD – brought in to take business to next level)

8.6.2 Organisation Description/Meeting Summary

Very small training company which has been successful in doing safety passport training for construction industry. They also operate in logistics and agriculture and are accredited in these areas (CCNSG, NPTC, C&G for the 3 areas respectively). They are looking to get into O&G and mistakenly assumed they were at the meeting to see how we could help them do this.

8.6.3 Possible Next Steps

- We have recently identified a need in our member base for logistics training – if we don't find high quality local providers then may be worth a discussion with TDB

8.6.4 Priority for Further Engagement – Low

8.7 Travel

8.7.1 Taxi from NOF in Durham to Newcastle airport

AS, CO remained at Premier Inn in Durham until Saturday morning to catch train to London Heathrow and flight to Oslo Gardemon the main airport (50km north of city and best accessed with the airport express train)

8.7.2 Ryanair dep 18h35 Newcastle arr 21h40 Oslo Rygge airport

No food served so no dinner but flight did arrive ahead of schedule. Using Ryanair meant arrival in Oslo Friday night instead of day travelling via London on Saturday.

8.7.3 Bus Oslo Rygge airport to Oslo main station arr~23h00

Flying Ryanair is a cheaper option than full service airlines and offers good point to point options but they do fly to smaller airports. Oslo Rygge airport is 60km south of the city and requires a coach ride to get into town. Hotel was a ~1km walk from the bus station.

8.8 Hotel – Hotel Thon Cecil, Oslo

9 Sat 16 October 2010 – Oslo, Norway

9.1 Sightseeing in Oslo

Would recommend that people spending a free day in Oslo purchase a day card for public transport (NOK70). This will give you full access to buses, trains, trams and ferries in most of the Oslo area. It's very cost effective. The Oslo pass (~NOK270) should also be investigated if you are interested in the museums as well. The city is great for walking around in and this is probably the best way to see the central part. An interesting excursion up to the Holmenkollen Ski jump takes you up to the highest point

overlooking the Oslo area in ~45min from downtown. Ferry excursions to the islands are also interesting although I didn't get off on any of the islands.

9.2 Hotel – Hotel Thon Cecil, Oslo

AS and CO arrive from UK at the hotel at about 22h00.

10 Sun 17 October 2010 – Oslo, Norway

10.1 Sightseeing in Oslo

Dinner with AS, CO at TGI Friday's on the Oslo waterfront where a burger for about R180 is a good deal for Oslo!

10.2 Hotel – Hotel Thon Cecil, Oslo

11 Mon 18 October 2010 – Oslo/Trondheim, Norway

11.1 Meeting – Willy Olson at Thon Cecil Hotel 09h00-09h45

11.1.1 Meeting Participants

- WB
- Willy Olson (Intsok)

11.1.2 Meeting Summary

I met Willy at Africa Energy Week 2010 where he gave an excellent talk on content localization. He is ex-Statoil and an associate at Intsok. I wanted to follow up with him to explore his thoughts on our situation. His first observation that industry development in O&G is tough without national resource. Pointed out that UK/Norway industries developed separately along nationalistic lines despite there being \$5bn of infrastructure savings that could have been made (I note that as production declines cooperation is increasing to save costs). Liked the idea of SA a regional hub location and pointed specifically to the skills available here as well as finance, engineering services, recruitment etc. Suggests that we drag as many activities as possible into the cluster we are developing.

11.1.3 Possible Next Steps

- Maintain contact with Willy as a knowledgeable person who could provide insight and advice on certain issues.
- Follow up and make contact with the Chinese Studies centre at Stellenbosch

11.1.4 Priority for Further Engagement – Medium

11.2 Meeting – Intsok 10h00-11h45

11.2.1 Meeting Participants

- WB, CO, AS

- Eivind Nyhuus (Innovation Norway)
- Gulbrand Wengen (Intsok) - MD

11.2.2 Organisation Description/Meeting Summary

INTSOK - Norwegian Oil and Gas Partners - was established in 1997 by the Norwegian oil and gas industry and the Norwegian Government. INTSOK's objective is to work with companies throughout the industry to expand the business activities in the international oil and gas markets on the basis of the industry's leading edge experience, technology and expertise. Gulbrand Wengen gave generously of his time to introduce us to Intsok, present the results of a recent Intsok strategic analysis of the global market and answer questions on a variety of things (SAOGA members can request the presentation from us). Some key learnings and insights:

- Brazil local content promotion organization is PROMINP – they target 70% local content but Intsok believes this is too far – 50% is a more realistic number (it's also the Norwegian number)
- Norway is the largest offshore market in the next 4 years
- Intsok budget is NOK40million plus plenty of in-kind involvement from members
- Australia becomes the largest subsea market
- Operations market (not development) is the key market for SA - \$15bn in Angola
- Intsok measures its performance with the following criteria: number of partners in group, increasing contribution from industry,
- Website www.intsok.ru has competitive matrix for Russian industry – we should look to do something like this for the SA industry
- Intsok ranking of markets splits Angola and Nigeria into 2 separate markets – together they would be the biggest single global opportunity for Intsok
- They work on training and capacity building with NORAD and have a programme in Angola – Petroleum Institute for technicians (INP)
- Also have an initiative in Nigeria to provide ISO9000 competence in fabrication yards
- University of Stavanger is good competition to Sintek/Marintek – may be worth us considering
- PGS is the big Norwegian seismic player
- Suggest we look at some of the companies south of Trondheim – offshore supply focused.
- Intsok generally applies a 2 times economic multiplier to oil and gas jobs

11.2.3 Possible Next Steps

- Maintain contact with Intsok
- Seek to develop an Intsok style competitive matrix for the SA upstream industry

11.2.4 Priority for Further Engagement – Medium

11.3 Meeting – Mintra 12h30-14h00

11.3.1 Meeting Participants

- WB, CO, AS
- Ivar Viktil – MD/Founder

11.3.2 Organisation Description/Meeting Summary

This meeting followed our encounter with Mintra at the earlier Iesta meeting in Aberdeen. Mintra is essentially an elearning company that spun off from Marintek – has 60 employees. They produce elearning courses to a very high standard and provide tools around the creating of elearning material. We also liked Ivar a lot and felt he is a guy that would be good to partner with. Perhaps the most interesting thing they have developed is their training portal (www.trainingportal.no) which is the main learning management system for the Norwegian industry – pretty much all training on the Norwegian continental shelf is logged here. Working with OLAF (Oil Industry Association) was key to getting this established). The LMS technology would be available to SA to create a similar training portal in SA or even sub-Saharan Africa. They have a small initiative in Ghana but are otherwise not involved in Africa. Main elearning competitors are Atlas Interactive and Crescent. Ivar also graciously mentioned a UK competitor on the LMS side <http://www.kineo.com>

11.3.3 Possible Next Steps

- Engage them around a LMS for our industry
- Look to make some of their elearning material available to our industry

11.3.4 Priority for Further Engagement – High

11.4 Travel

11.4.1 Airport express train to Oslo Gardemon airport

11.4.2 Flight SAS dep Oslo 17h00 arr Trondheim 18h00

11.4.3 Bus Trondheim Airport -> Trondheim centre (~40km) arr19h00

11.5 Dinner – Morten Westvik, Marintek

11.5.1 Participants

- WB, AS, AS
- Morten Westvik, Marintek

11.5.2 Description

WB, AS, CO met up at with Hans Talleras and Morten Westvik at the Rica Nidelven and then walked with Morten Westvik (Hans left for another appointment) to the Havfruen Fiskerestaurant where we were served a set menu with traditional Norwegian fish. We settled on a traditionally prepared cod fish for mains but also sampled the interesting local delicacy of lutefisk which is a dried fish soaked in a solution of cold water and birch ash – has a jelly-like consistency that while edible is somewhat strange to a foreign palate! The traditional Aquavit drink was a nice complement to the wine of the evening. Morten was a gracious host and it was a great evening. Given the Norwegian restaurant prices, was pleased that SAOGA didn't pick up the bill!

11.6 Hotel – Thon Gildevangen, Trondheim City Centre

When booking hotels in Norway and in Trondheim in particular be aware that the Thon and Rica (recommended in Trondheim) chains are the most widespread in the country. One has to be careful to ensure you are booked in the right ones (SA travel agents are generally clueless) – take particular care to ensure you are not at the airport when you want to be in the city centre because airports are typically 30-60 min out of town.

12 Tue 19 October 2010 – Trondheim, Norway

12.1 Meeting – Marintek 9h00-12h30

12.1.1 Meeting Participants

- WB, AS, CO
- Morten Westvik (Senior Consultant)

12.1.2 Organisation Description

Marintek is part of the Sintef Group which is a quasi-public applied organisation akin to the South African CSIR. Marintek is the part of Sintef that focuses on Maritime and offshore research – a lot of it for the oil and gas industry.

12.1.3 Meeting Summary

Marintek worked with us on the offshore supply base study earlier in the year and this conversation was a follow up designed to explore the possibility of a longer term engagement with them to undertake a program of activities to provide thought leadership to the process for developing the South African Oil & Gas sector. Marintek has previously had experience helping maritime and oil and gas clusters to develop by identifying value chain opportunities, building strategies for developing these, fostering collaboration within the industry etc and we are keen to explore ways that this could be continued. There is also the possibility of significant NORAD support for work of this nature which dramatically reduces the cost to SAOGA and our members of accessing world class resources and thinking.

12.1.4 Possible Next Steps

- The clear next step was for SAOGA to define some specific project areas for the potential collaboration; Marintek will then work with us to develop a more comprehensive proposal that can be taken to all parties

12.1.5 Priority for Further Engagement – High

12.2 Meeting – SMS (Ship Maneuvering Simulator Centre) 13h00-14h30

12.2.1 Meeting Participants

- WB, AS, CO
- Stig-Einer Wiggen – MD (met briefly)
- Lars-Einar Bjorset (Sales Consultant)

- Ole Johan Bjorke (Finance & Admin Manager)

12.2.2 Organisation Description

SMS is a DNV approved maritime simulator centre – it is the only one in the world that has DNV approval for the centre as a whole. The facility has bridge simulators, DP simulators and an offshore crane simulator all operated using SMS-developed industry leading simulation software.

12.2.3 Meeting Summary

We spent some time listening to a presentation on SMS and then did a short presentation on SAOGA after which we visited the various parts of the simulator centre – getting the opportunity to pilot a tanker up a channel to a berth in one of the simulators (the job can be a lot of fun!). A few facts of interest regarding SMS:

- Origin of the centre was in a public entity
- They have had roughly 10000course participants in the 30 years they have been operating ~300/year
- They are certified by Nautical Institute for DP, OAA approved centre for MCRM, IMCA
- They do offshore loading training for StatOil
- One optics component in the centre cost NOK40MM (I never worked out exactly what this was)
- They have a simulator centre in Manila which does ship, crane and DP training
- Also some activity with a simulator in Brazil

12.2.4 Possible Next Steps

- Possible linkup with SAMTRA to provide the 3 simulation activities in Cape Town

12.2.5 Priority for Further Engagement – Medium

12.3 Meeting – Network partners @ Marintek 15h00-16h30

12.3.1 Meeting Participants

- WB, CO, AS
- Hans Talleras (NORAD/Korhus Consult)
- Tom-Ivar Bern (Innovation Norway) – Senior Advisor
- Eivind Nyhuus (Innovation Norway)
- Gunn Anita Lovrod (Numerical Rocks) – Senior Engineer
- Hakon Boen (Miros) – Director BD
- Erik Sandsdalen (Miros) – MD
- Olaf Sveggen (Fugro Global Env & Ocean Sciences) – Director Sales & Projects
- Morten Westvik (Marintek)

12.3.2 Organisation Description/Meeting Summary

This was essentially a networking meeting to deepen the links with the Norwegian companies that have made a commitment to participate in the network office that we host in Cape Town i.e. all are

interested in either establishing a presence in SA or partnering with a local company. The session involved a short introduction from everyone there with a verbal overview of their company followed by a presentation from SAOGA on the current state of activities in our region – this was accompanied by some Q&A. The companies that joined us do:

- Numerical Rocks – have an algorithmic approach to drill core sample analysis that dramatically reduces the time and cost of analyzing drilling results. Have been doing some pilot work with PetroSA on this;
- Miros delivers services for wave and water monitoring in general and integrated systems within the fields of Meteorology, Oceanography and Security.
- Fugro Global Environmental & Ocean Sciences provides oceanographic and meteorological (metocean) services for offshore and coastal engineering applications, through cost-effective, high quality and technically advanced measurement, consultancy, information systems and forecasting services.

12.3.3 Possible Next Steps

- Continuing engagement with the Norwegian network through network office and other activities

12.3.4 Priority for Further Engagement – Medium

12.4 Dinner – Kvilhaugen Kro

Treated to dinner by Innovation Norway who hosted us and the network partners to a wonderful dinner in this cosy old converted barn restaurant quite close to the Marintek campus. A good opportunity to get to know some of the individuals in the Norwegian partner programme in a more informal setting. The food was pretty good too! Temperature was cooling off as we left ready for the snow overnight – the first of the season in Trondheim.

12.5 Hotel – Thon Gildevangen, Trondheim City Centre

13 Wed 20 October 2010 – Trondheim, Norway

13.1 Meeting – Kongsberg Seatex 9h00-11h30

13.1.1 Meeting Participants

- WB, AS, CO
- Hans Talleras
- Eivind Nyhuus (Innovation Norway)
- Magnus Leirvik (Seatex) – Area Sales Manager
- Trym Ryan Aag (Seatex) – Sales Manager
- Tony Haugen (Seatex) – Project Manager

13.1.2 Organisation Description

Seatex is a spinoff from Sintef that was acquired by the Kongsberg group in 2000. It has a 100 staff and focuses on advanced positioning and motion sensing solutions (GPS on steroids I thought). They essentially provide equipment for this type of purpose

13.1.3 Meeting Summary

A presentation by Seatex followed by one by us:

- Kongsberg is the biggest DP manufacturer in the world and Seatex supplies to them
- They have 3 main business areas: high end satellite navigation for marine services, attitude determination and microwave technology
- Their main competitors are Trimble, RadioHolland and others like: DARPS, MRU, RollsRoyce, Marine Technology in certain markets
- Primary customers are shipowners and yards
- They do provide after sales service through regional offices and use agents in some parts of the world
 - They use Unique Group in Africa and Unique Hydra already has a relationship with them

13.1.4 Possible Next Steps

- No obvious next steps to work with Seatex given that they wouldn't generally sell directly into SA market and that they already have a relationship with Unique Hydra
- There may be an opportunity to follow up with Kongsberg Maritime to do operator training for offshore

13.1.5 Priority for Further Engagement – Low

13.2 Meeting – Falck Nutec 12h00-14h30

13.2.1 Meeting Participants

- WB, AS, CO
- Eivind Nyhuus (Innovation Norway)
- Hans Talleras
- Trygve Birkeli (Falck) – Director BD (from Bergen)

13.2.2 Organisation Description

Falck Nutec is a major provider of offshore and safety training to the O&G, Shipping, Aviation and defence industries. They are multi-national (Falck is Danish company with more general interests with the Nutec part being the legacy of a Norwegian Training company) with facilities around the world including Nigeria and Angola.

13.2.3 Meeting Summary

Our meeting with Trygve Birkeli was essentially a follow up to his visit to Cape Town in February 2010. Falk Nutec are very interested in establishing an offshore training and survival centre in Cape Town and would like to do this in partnership with a local provider. On their trip to CT they identified either CPUT or Northlink college because of their facilities in Grainger Bay and Cape Town Harbour respectively. They estimate an investment of ~EUR5million to build/upgrade. The decision for them is whether the market exists to justify this investment. Han Talleras pointed out that NORAD money could be available to help reduce the risk to Falck Nutec. We also did a tour of their facility which gave us a good idea of the sort of standard that they maintain (CPUT facility compares favourably).

13.2.4 Possible Next Steps

- Falck Nutec had a next step to work with NORAD and go back to their Board prior.
- SAOGA undertook to prepare CPUT (and Northlink if desired) for a visit by Hans Talleras in early November (this visit happened and we facilitated a meeting with CPUT on the basis that the Falck Board had decided to proceed with investment if they come to terms with a partner) – Falck will visit in Q1 2011.

13.2.5 Priority for Further Engagement – High

13.3 Travel

13.3.1 Flight Trondheim->Oslo (Rygge)->arrives London Stanstead 11h00

Flight arrives as scheduled at Heathrow. AS, CO separate at arrivals as they are on a later flight to Aberdeen. Several hours spent in domestic terminal waiting for flight to Aberdeen

13.3.2 Flight BD London Heathrow to Aberdeen 10h15-12h00

Arrive Aberdeen as scheduled and take taxi to Holiday Inn Express hotel in the city centre where we will be staying.

13.4 Hotel – Radisson Blu, Stanstead Airport

Arriving late into Stanstead leaves the option of a late train (45min) into London or staying at the airport. I elected for the latter – the Radisson is good choice as it is connected to the airport and 2min from the train station under the airport.

14 Thu 21October 2010 – Portsmouth/London, UK

14.1 Travel

14.1.1 Train Stanstead Airport->London->arriving Portsmouth Harbour 9h35

Caught the 6am Stanstead Express from airport to Liverpool Street station, underground to Waterloo where I met CO,AS and took 8am train to Portsmouth.

14.2 Meeting – VT Flagship 10h00- 13h45

14.2.1 Meeting Participants

- WB, CO, AS
- Paul Dunn (VT Group) – BD Manager
- Nigel Clay (VT Group) – Electrical Training Manager

14.2.2 Organisation Description

VT Group provide technical and artisan training for the Royal Navy (Portsmouth is Royal Navy HQ). They have also developed a programme on their Portsmouth site to train artisans of various kinds for corporate customers. Generally this is done through a 9-month classroom residential programme before the students head back to their companies for practical training.

14.2.3 Meeting Summary

We got an overview of the VT activity in Portsmouth through a talk and a tour of the facility. Was impressive to see their set up. They work with major industrial customers (Network Rail, EDF, Southern Water etc) to provide classroom/college training for these company's trainees. They do various kinds of programmes for different customers. The core programme:

- Mechanical, fabrication & welding, electrical and control instrumentation training with comprehensive course offering
- Residential accommodation for 16-25 year olds – live in navy accommodation and have a sports programme etc.
- Leadership training programme
- Residency period is 2 years with further 12-24 months practical training at the employer

VT was involved (5 people in CT for 5 months) in the first half of 2010 with working in the Simonstown Dockyard and putting together a comprehensive proposal for turning around the dockyard and training ~350 people a year for the dockyard and industry as a whole. Despite all this effort there has been some problems closing the deal because of Armscor indecision! In the meanwhile VT has been acquired by Babcock and all deals have been placed on hold while the impact of the Royal Navy cuts plays out. Another factor that was explicitly mentioned is the general perception of risk related to SA in some UK corporate (not helped by things like talk of mine nationalization). Paul Dunn is still optimistic that this will proceed though.

14.2.4 Possible Next Steps

- Once VT has indicated that they are ready to proceed with the Simonstown Dockyard project then we can help lobby the process through connections with Armscor
- Stay in regular touch with Paul Dunn at VT

14.2.5 Priority for Further Engagement – Medium

14.3 Travel

14.3.1 Train Portsmouth Harbour->arriving London->arriving Portsmouth 15h15

Train back to London Waterloo and then taxi to City & Guilds office near St Pauls – arrived about 20min early for appointment.

14.4 Meeting – City & Guilds 16h00-17h30

14.4.1 Meeting Participants

- WB, CO, AS
- Seth Ferguson – Senior BD Manager International Development

14.4.2 Organisation Description

City & Guilds is an ancient non-profit organisation that develops and accredits qualifications of all kinds. Generally these relate to trades and work place courses rather than degree level qualifications.

14.4.3 Meeting Summary

Seth Ferguson is their international head of business development and he gave us an overview of the organisation and its mission. C&G does operate in SA and they have an office in Jhb that is run by Juan Visser – they seem to focus on health & beauty and catering etc in SA. He outlined the process for getting a qualification approved by C&G

- Formal application detailing the approach, facilities, staff etc;
- C&G provides support through the approval process
- Industry experts then visit to verify and audit the centre prior to approval
- Once approval is granted the centre can start delivering – learners will be assessed and programme monitored on an ongoing basis
- They can set and inviolate exams

The C&G website is a key resource <http://www.cityandguilds.com/int-home.html>

Costs for C&G (centre needs to be approved every 2 years internationally)

- Centre Approval GBP1500
- Qualification approval GBP200
- Learner registration and certification per learner?

14.4.4 Possible Next Steps

- Seth sent us a bunch of material about O&G qualifications they run
- Generally not a significant player in the O&G space and probably not much reason to follow up here

14.4.5 Priority for Further Engagement – Low

14.5 Hotel

- WB – Dinner and accommodation with friend in Enfield (25 min train ride to North London)
- AS, CO – Holiday Inn Express Southwark, London near Waterloo station

15 Fri 22 October 2010 – London, UK

15.1 Travel

15.1.1 Train from Enfield to London Waterloo

15.2 Meeting – CWC School for Energy @EIC 10h00-12h00

15.2.1 Meeting Participants

- WB, AS (CO sick at hotel)
- Gary Touhtarian – BD Manager
- Also said hello to Raelene Rifkind at EIC (South African in charge of their events function)
- We received card for Charlotte Hurst of EIC who manages the Southern Region but was not in the office at the time

15.2.2 Organisation Description

CWC School for Energy is part of the wider CWC conference and exhibition organizing group – it has been operating for about 7 years. They specialize in hosting CPD accredited short courses for the energy industry and have a substantial number of offerings of interest to the industry. Generally they contract top academics and professionals to deliver their courses.

15.2.3 Meeting Summary

Gary is the Business Development manager for the school and we discussed the proposition of having them participate in the MOGA. There was not an immediate yes but they are certainly willing to consider it as we firm up the proposition. One thought that is attractive to them is the idea of being able to serve the Nigerian and other West African markets from South Africa – this would allow them to segment the market to capture clients from Nigeria who don't qualify for company trips to the US or Europe but who could qualify for trips to SA.

15.2.4 Possible Next Steps

- Maintain contact and approach as MOGA matures

15.2.5 Priority for Further Engagement – Medium

15.3 Meeting – IMCA 13h00-14h30

15.3.1 Meeting Participants

- WB, AS
- Hugh Williams - CEO

15.3.2 Organisation Description

IMCA is the International Marine Contractors Association and has a global member base of offshore, marine and underwater engineering companies. They focus on setting good practice guidelines for the industry and disseminating information related to safety and technical issues through seminars, newsflashes etc.

15.3.3 Meeting Summary

Hugh Williams is a delightful character and was extremely welcoming and helpful. We started with a quick introduction of SAOGA and then Hugh made a few comments about SA from his perspective:

- Member companies of IMCA use SA/CT as a staging point for the region e.g. Dockwise
- There will be continued work in CT around logistics
- Dry-docking will grow, planned and unplanned – we may want to work with IMCA to get their members to think about CT as a dry-docking opportunity

IMCA has a role to play in setting guidelines

- They have a strong relationship w/ several SA firms on the diving side e.g. Cape Diving, Smit, School at SB and Subtech were all mentioned
- IMCA has a list of diving quals that it recognizes – these are the various national standards which at this stage includes SA. He mentioned that the quality control of SA Diving is in trouble and that Alan Thomas of Cape Diving is working closely with DoL to keep this quality control up
- SA does initial dive training but the supervisor diver training is done by IMCA director (SA training providers do this) – notes are a bit confused on this point.
- IMCA is in the process of creating a syllabus for subsea rigging
- There is no universal ROV training certificate – IMCO was mentioned as a body involved in this
- On the marine side most things are controlled by IMO in the form of regulations so IMCA does not get involved in this.

Diving and DP are IMCAs 2 biggest areas – they focus on guidance not on standards. They have written competence guidelines on all of the different offshore sector disciplines (40 of them). Even though IMCA guidelines are not mandatory oil industry operators generally make it contractual obligation to work in line with IMCA standards. On the DP side IMCA provides guidelines on courses and equipment but the Nautical Institute in London actually certifies.

IMCA publishes lots of different logbooks for different disciplines which they sell in enough volume for it to be a significant revenue source for them.

IMCA is pushing for a global offshore safety training standard – OPITO is de facto becoming this in the O&G industry. They also collect and publish safety stats for the offshore industry.

15.3.4 Possible Next Steps

- Stay in touch with Hugh Williams
- Consider working with IMCA to see how we can promote the SA ship repair and dry docking industry.

15.3.5 Priority for Further Engagement – Medium

15.4 Meeting with IC MEDIA LTD @Holiday Inn Express Southwark 15h00-16h30

15.4.1 Meeting Participants

- AS,CO and Gavin Mc Gill Managing Director of IC Media

15.4.2 Organisation Description

IC media is a training company, providing Global Training Management, E-learning, Training Consultancy, Competence Management, Technical Procedures Authoring and Training Services.

15.4.3 Meeting Summary

Gavin Mc Gill demonstrated the powerful Training Management systems and reflected on the services IC Media is able to provide. This includes its IC Dimensions Training and Competence Management System, training centre set up capability, process operations simulator and marine simulator systems. AS and CO will be given limited access to the Training Management system.

15.4.4 Possible Next Steps

SAOGA is to investigate the application value of the offerings. The Training Management system is of interest for its global reach and benchmarking potential. E-learning possibilities should be evaluated. Gavin Mc Gill agreed to provide SAOGA with an indication of the costs of the respective services on offer.

15.4.5 Priority for Further Engagement – Medium to high depending on a study of the applicability of the offerings

15.5 Travel

15.5.1 WB – Train to Reading arr 17h00

15.6 Hotel

15.6.1 WB – Accommodation and dinner with brother and family near Reading

15.6.2 AS, CO Holiday Inn Express, Southwark –London

16 Sat 23 October 2010 – Reading, UK

16.1 Travel

16.1.1 WB

16.1.1.1 Railair Bus – Reading->London Heathrow

16.1.1.2 SAA dep London 21h00 (Cape Town direct)

16.1.2 CO, AS

16.1.2.1 SAA dep London 20h00 (Cape Town via Jhb)

17 Sun 24 October 2010 – Arrive Cape Town

17.1 Travel

17.1.1 WB - Flight arrives Cape Town 11h00

17.1.2 AS, CO – Flight arrives Cape Town (from Jhb) 12h00

18 Summary and Conclusions

- We encountered a lot of really interesting training providers and offerings: the Ship Maneuvering Simulation Centre in Trondheim was an eye opener in terms of simulation capability, NSL has a very specialized course in subsea lifting and rigging for divers, VT Group who do, a Norwegian company called Mintra has a very interesting learning management system that essentially logs all the skills qualifications in the Norwegian North Sea to name a few;
- In time with UK and Norwegian oil and gas associations that have been deeply involved with the successful development of upstream sectors in those two countries (Intsok, UK Oil & Gas, EIC, PILOT) I was struck by the degree to which industry task teams and working groups have done the real work for these associations and impressed on me the need for us to shift work from SAOGA onto motivated industry groups supported by us – this is way to ensure that the right things are done and done in a way that makes an impact;

- On the training and standards side it was interesting to note that associations routinely develop “guidelines” for industry on training, ways of working etc. Many of you are already using many of the global industry guidelines (e.g. IMCA for diving training etc) but challenged us to make sure that we do more to identify and make these guideline documents available through our website. It also means that we can piggyback off the vast amount of work that has already been done by others when it comes to, for example, discussions with the SA qualifications authorities about training standards;

Almost every meeting we had contained valuable insights for the SAOGA and our members and it is a challenge to summarise the key insights from the trip. It is likely that each reader of these meeting accounts will draw different insights and attach importance to different information but we would note the following as being of particular significance in summarizing the trip:

- There is strong interest in participating in the MOGA/SA training cluster, in many cases with opportunities for SA partners;
- There are a number of high value/specialized training offerings that we could potentially set up in SA e.g. a subsea lifting/rigging course;
- Industry task teams and working groups have been key to association activities and the growth of the UK and Norwegian oil and gas industries – SAOGA needs to find ways of working that emphasise greater leadership and involvement by our members;
- Associations have played a key role in setting guidelines and standards for training and ways-of-working for the industry; many of these are available to us and we should be using and disseminating them within our member base;
- There is plenty of willingness on the part of associations and governments to help us develop our industry;
- SAOGA can enhance its offerings to members through partnerships that allow access to marketing capability of other associations – e.g. offering members access to UK arranged trade missions to sub-Saharan Africa.